

MACDONALD COLLEGE JOURNAL



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Farm . Home . School



THE MACDONALD LASSIE

Season's Greetings

MACDONALD TOBACCO CO.



"I Don't Use What I Have . . ."

There's a good story about a farmer who objected to having his good tax money used for employing agronomes. A neighbor took issue with him, trying to show that agronomes far more than paid their way by supplying farmers with new information that would make their operations more profitable. But the first man was not daunted.

"That's a good one," he said. "Why, I don't use half the information I have now."

There's a lot in what he said; if most farmers used all their knowledge we would be a lot further ahead. But few do. The trouble is that, while we have a lot of information, most of us can't see how we can put it to work on our own farms; and that's the big reason for agronomes. Their job isn't a quarter as much to introduce new ideas as to help farmers apply what we already know.

The gap between our information and application is very wide. Part of it is, no doubt, due to habit; it's much easier for us to keep on doing what we're doing than to change to anything else. Part is due to expenses entailed in changing practices — expenses which farmers either can't meet or aren't convinced the returns would justify. And part is due to the haziness of our information — we're not exactly sure how it would apply to us, or how to go about using it.

New practices may overcome these drawbacks under several sets of conditions. Their results may be so dramatic that we can't help being struck by them — like hybrid corn. They may spring from emergency — like the replacement of the mouldboard plow by the one-way disc on the prairies. Or they may be the result of a deliberate attempt to cut costs of production or to remove crop risks, like the combine harvester or the forage harvester.

There have been many such developments in the last fifteen years. No industry in the world is developing faster than agriculture; and no other has greater opportunity for further development. But we have no right to be smug about our progress unless we make the most of our opportunities; and we're far from doing that.

Post-war developments have pressed home to farmers a great many points which had eluded us before. One is that Canada has to compete with many other countries to get markets for its agricultural products; the other is that, in order to get satisfactory returns, we must lower our costs of production. Through a continuous process of inter-farmer competition, those who are not reducing their costs fast enough are being forced out of the business. It isn't a pleasant situation; but it's a fact.

Our progress is very uneven. Field equipment generally has shown a considerable change over the last few years; but inside the dairy barn, for example, the only major development in a generation has been the installation of milking machines. How long can our present "time-honoured" methods compete with those of other countries where costs are not so high? And the same question may be applied to almost any aspect of Canadian farming, where transportation is a big factor in costs. Obviously, we must adapt our thinking to meet real, present-day situations.

In this special number of the Journal you will find information on some modern trends in farming and rural living. The "modern" is used in the sense of something being more useful, more efficient, more comfortable or more enjoyable than the things it has supplanted. And it is applied only to things that have been tried and accepted by quite a lot of people, and which are applicable to a great many more. We hope you will find these articles useful in charting plans, not only to hold your own, but to forge ahead.

Our Cover Picture

There is no particular significance in our choice of cover picture this month. We know our readers have seen Christmas covers on practically every magazine dated December, so we thought we'd be different and just print an attractive winter scene. For the curious, we will identify the building on the left as the Main Building at Macdonald College, with the Biology Building on the right.

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Chairman of the Board: W. H. Brittain, Ph.D., Editor: A. B. Walsh, B.Sc. (Agr.): Associate Editor: H. R. C. Avison, M.A. Farm Editor: J. S. Cram: Circulation Manager: L. H. Hamilton, M.S., Business Manager: J. H. Holton, B.Com.

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What About Loafing Barns?

Photos by Argue

Pen barns seem to offer some farmers a way to cut the cost of milk production. But they won't solve everyone's problem; and there are many points to consider in deciding whether to switch over to this type of equipment. This article discusses a number of the pros and cons of pen barns.

by L. H. Hamilton

THE question of livestock equipment and the changes which are taking place is presently both timely and of interest to farmers. This is due, in some measure, to the scarcity of qualified labour, the high cost of inefficient labour and the increasing necessity for greater efficiency in handling our live stock.

Because of our long winter season and the severity of the weather, housing and feed storage have always been expensive. This is particularly true in the province of Quebec where dairying and winter milk production occupy such an important place. Because of this it is natural that considerable interest has been aroused over the new "loafing pens and milking parlors." Many farmers want more information. Some have already changed over, while others have built and are building new barns of this type.

The popular questions, however, are: "How much does it cost? Will it save labour? And is it practical?" These questions of course, can only be answered by a knowledge of the local conditions. Considerable information on these

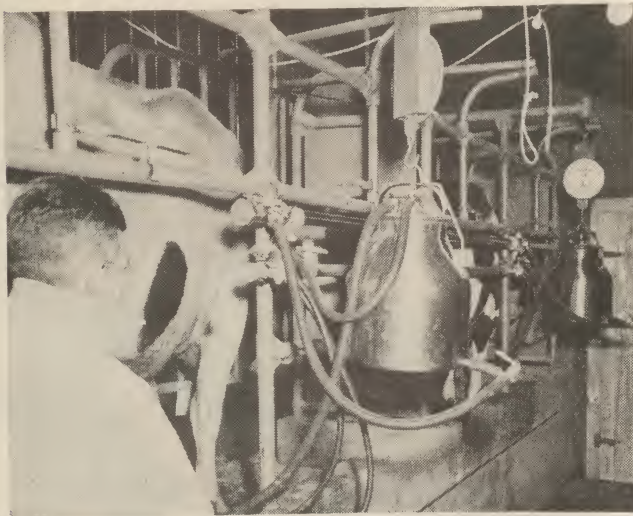


Loafing pen barn of Gordon Brownlee, Shawville, Que. Cows are fed in the manger on the wall behind them.

questions has been summarized very briefly by the University of Wisconsin where an experiment has been going on for the past eight years. In this it is interesting to note that they do not recommend pen stabling for the careless farmer or those whose record for clean milk production has not already been satisfactory. They do not advise a pen stable program if the barn is located in a low area or where water occasionally floods into the barn during rainy periods or following thaws. They do not recommend the pen barn unless the farmer can raise or produce his own bedding. They further do not recommend pen stabling until a few minimum regulations have been adopted.

Ceiling Must Be High

For those who wish to change to the pen type barn, they advise that the location of the barn must be satisfactory and the ceiling not less than ten feet in the clear. Adequate bedding must be assured, their experience indicates a requirement of fifty percent more than is required for the stanchion type barn. Adequate room for cows is an essential. Holsteins and other large breeds require 90-100 square feet per cow. Ayrshires and small Holsteins require 80-90 square feet per cow not much more than the normal requirements. They suggest some regulations to prohibit increasing the size of herd until the barn is enlarged. They further suggest that facilities for providing at least two gallons of hot and cold water per cow be provided and that no attempt to change or build be made before definite plans have been drawn up. Since it appears to be generally agreed that pen barns can be built for less cost, it would perhaps be well for those considering such a move to give serious consideration to the "do's and don'ts" suggested.



Two cows being milked in the tandem milking parlor. Note the R.O.P. scales, and the ropes for opening and closing the doors to the barn.

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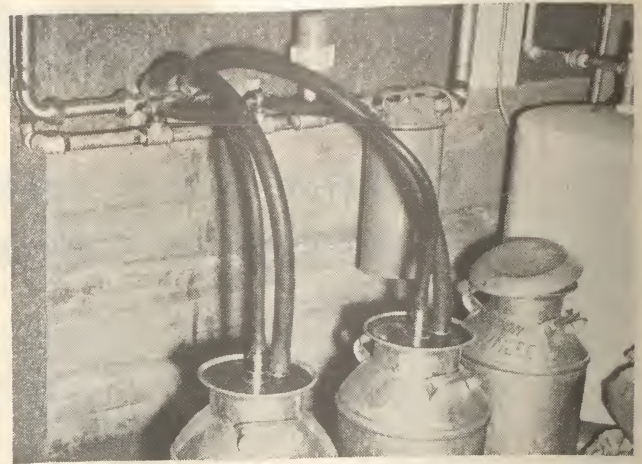


In comparing the advantages and disadvantages of the two types of barns it has been pointed out that in pen barns, cows will usually be cleaner and be more comfortable. This is true when plenty of bedding is used and because of the higher temperature of the manure on which they lie. The milking room of the pen barn can be kept clean with less labour, and generally the labour requirements for the pen type barn are somewhat less, though there is little difference in the labour for milking. Bossy cows are more troublesome, and all cows should be dehorned. Disease problems were found somewhat less in the pen barns at the University of Wisconsin. There appears to be a definite advantage in favour of the stall barn in displaying one's herd. This might be an important consideration with the purebred breeder. It has also been suggested that the installation of a gutter cleaner and some reorganization of the stabling would overcome many of the factors favoring the pen type stable.

Experiments With Feeders

No doubt many new ideas on building new barns and remodelling old ones will come to light in the near future. There appears to be some chance of improving feeding facilities and some experiments are under way with self-feeders. There is still some doubt about the general type of barn from the standpoint of feed storage. For those contemplating changes or new buildings, every effort should be made to avoid extra expense by keeping informed of recent changes. At present it can be said that the new pen type barn has proved satisfactory in many districts.

Many modern conveniences such as the milking machine and grinding, mixing, and cutting equipment, are now available to farmers. These have followed closely the use of electric power but have been introduced in many instances before electricity was available. These modern



The milk is delivered into the cans in the cooling room. The white electric heater provides hot water for washing, and for heating the milking parlor.

conveniences on the farm have made it possible to operate larger units or keep more milch cows, to use home-grown feeds more efficiently, and to provide better feed mixtures. It is not so long ago that feed had to be hauled to the mill for grinding. This was a laborious and time-consuming job which has disappeared in many areas.

Probably one of the most appreciated features of electricity on the farm is the supply of hot water in many barns, and the use of modern conveniences such as refrigerators, electric irons, etc., in the farm home. These have all contributed greatly to more wholesome and better living on the farm.

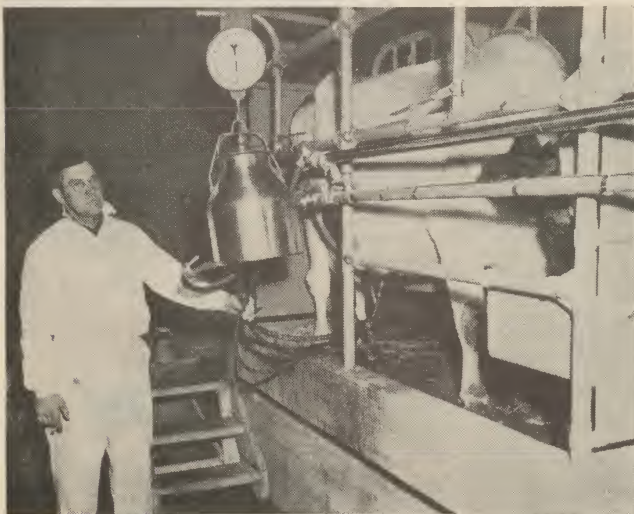
From a livestock point of view, much has been done to eliminate the drudgery of former years. We have not, however, found a substitute for human intelligence in handling stock. "The eye of the master" still fattens his cattle. Nothing has appeared so far to take the place of constant attention to the many important details of live stock management.

More Milk Fat Used In U.S. Despite Margarine Gains

U.S. dairymen who claim that oleomargarine is ruining them simple aren't facing the facts, according to a study made by Dr. Geoffrey Shepherd of Iowa State College.

Dr. Shepherd found that the use of oleomargarine in the U.S. could explain only half the decline in butter usage from 1941 to 1948. He concludes that other factors were just as important. For example, there has been a steady decline in the use of bread and of potatoes, which would account for a considerable drop in butter demand.

At the same time, he adds, a considerable change has taken place in the U.S. pattern of utilizing milk fat. Less is being made into butter and more is being used as fluid milk, cheese and ice cream. And despite the decline of butter the total amount of milk fat used per person annually has increased.



Louis Judd, Mr. Brownlee's son-in-law and partner, prepares to take off the milking machine. The R.O.P. scales weigh the milk before it is forced through the stainless steel tubing into the cooling room.



FOOD *MUST* GET THROUGH

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a steady flow of Food to Canadian tables**

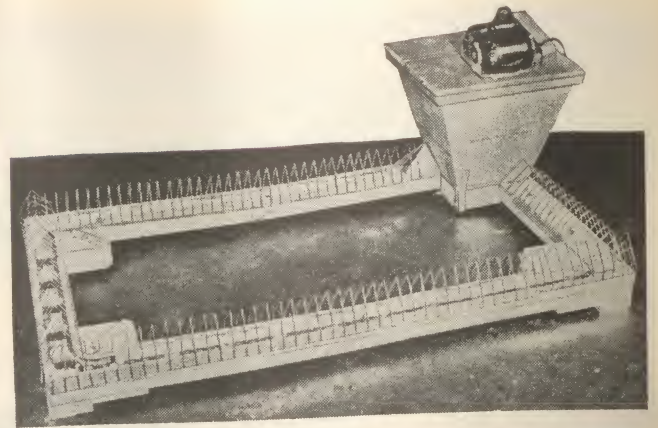
Getting food to Canadian tables involves a constant struggle with the elements, a constant race against time.

It's a struggle to get seeding done in time; a struggle to control weeds, insects and plant diseases; to get crops harvested before damage is done by rain or frost; and to make sure that produce reaches its destination when needed.

Massey-Harris farm machines play an important part in keeping supplies of food flowing to Canadian tables. With the aid of modern machinery the farmer is able to get more work done in the short seasons when it has to be done. He is able to perform each operation more efficiently and thus raise more and better crops.

MASSEY-HARRIS

Poultry-keeping is far ahead of any other branch of agriculture in degree of mechanization. Apart from culling, there's scarcely a job on the poultry plant that can't be done by a machine; and maybe in a couple of years there'll be one to boot out the loafers, too.



An automatic feeder, where an endless belt carries feed from the hopper and cuts down waste.

The Machines Take Over

by W. A. Maw

THE general trend in poultry equipment is to develop mechanical means of doing definite phases of work, such as feeding, watering, cleaning batteries or dropping boards, gathering and grading eggs and dressing poultry meat stock.

Poultry production has been improved through the adoption of larger housing units and mechanical equipment on a strictly business basis. Larger numbers of producing layers or growing stock can now be successfully handled per man. The heavy labor of carrying water can be easily dispensed with where the houses are insulated to maintain above-freezing temperatures during the winter months. The handling of feed may also be done more easily with the use of the overhead carrier track and a platform or box carrier for the feed. The same equipment can be used in bringing eggs from the houses. Automatic feeding devices are now on the market. The stock can be fed mash or grain, by the use of motor-driven belt or chain carriers, in a trough running through the house and returning to a supply bin.

House ventilation, room humidification, incubation, brooding and processing equipment are all coming into the field of automatic mechanical control, thus ensuring to a greater degree than ever before that optimum conditions can be provided for production as well as for processing work. The modern poultry dressing equipment has completely changed the job of killing and dressing poultry for market.

The handling of large units of production has been the main reason for the rapid development of mechanical equipment for such work. Increased labor costs are, perhaps, a second reason, but still we are in the mechanical age when new ways of doing the job are appearing from day to day.

The daily routine jobs of watering and feeding take the major part of chore time. The importance of fresh

clean feed, as well as water, cannot be overemphasized. The continuous flow-type fount is the latest development, although it necessitates a drain to carry off the surplus running water. Water temperature is also controlled, where desired, by the use of soil type electric cable wrapped around the water-pipe just above the fount. Automatic watering devices are available for chick batteries.

The mechanical feeder, with or without the automatic time-clock control mechanism, has revolutionized the feeding of mash rations to large numbers of birds in large houses. A central supply bin, which can be filled by direct flow from a supply bin above on a second floor or through the wall from outside delivery, greatly reduces the handling of the feed. The feeder bin has a propeller-type agitator in the bottom to keep the feed free for movement by the belt cups or chain carrier. The motor-driven chain has considerable strength, allowing it to pull over a long distance in the trough.

Advantage of Feeders

The distinct advantage of such feeders is that through action the birds are attracted to the trough and appear to enjoy eating the fresh clean feed as it passes by. The trough line is set up at feeding height for chicks and broilers and on a stand for layers. Some provision should be made to avoid the possibility of litter being scratched into the trough.

Mechanical ventilation by use of the electrically driven fan is now commonly used to move room air laden with moisture from the house. Since the type of house, as well as the size of the house, influences free natural air movement, the mechanical ventilation greatly improves the air and litter conditions in many houses.

Incubation and brooding equipment has been brought to a point where temperature control is automatically handled and moisture in the incubator is cared for.

It's a fact



That a Canadian Jersey has Produced 5-1/3 Tons of Butter in 10 Lactations

Brampton Lady Basilua, a Canadian Jersey cow, has made a new world's record for butter fat production . . . 8,970 lbs. of fat (equivalent to 5-1/3 tons of butter) in her first 10 lactations. We salute the cow and her owner and the herdsman who handled her. We also salute the scientists who sought out and disseminated the knowledge of breeding and nutrition that was required to create an animal of such capacity, and to develop and maintain her.

It's a fact

That Oil Research has Developed Over 600 Useful Products from Petroleum

Research men in the oil industry have made what is probably a world's record in broadening the usefulness of a raw product. Time was when the by-products of oil refining were discarded as useless. Today, more than 600 useful products are marketed under the "Esso" trade-mark. This greater utilization of crude oil has added to our standard of living and helped to hold down the cost of engine fuels, lubricants and heating oils.



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Farm Division

Egg Gathering Device

Under modern large-unit housing of layers one of the biggest daily chores is the gathering of eggs. To overcome this problem and to use mechanics further in poultry management, an egg-gathering device has been invented and put into use. The device, a travelling belt, not only carries the egg from the nest immediately after the layer leaves the nest, but it carries the eggs to a cooling room and delivers them into a wire basket. A fan blowing air over moist cloths cools the eggs quickly.

Egg room temperature and humidity are all-important in maintaining egg quality. Mechanical humidifiers have come into use. The moving air is directed against water, picking it up and distributing it into the room air. Sensitive control apparatus maintains the desired air moisture.

The mechanical egg grader sorts the eggs on a weight-class basis, thus ensuring accurate sorting. The individual who candles the egg for interior quality places the eggs on the travelling grader.

Washing machines have been developed and put into commercial use to wash soiled eggs in water. Generally speaking, washed eggs do not hold their quality as well as the unwashed eggs, but under commercial conditions soiled eggs must be cleaned.

Poultry Processing

The greatest invention in the marketing field has been the plucking machine for either wet or dry picking of all classes of poultry stock. Modern machines now in use to kill and dress the stock are highly specialized for the various phases of work to be done. The bird may be killed by use of the regular knife for bleeding and braining or by using the electric knife which stuns the bird by electric shock at the same time as it is being bled. Travelling shackles, which hold the bird securely by the feet, carry the bird through the entire dressing operation on an overhead track. The water bath temperature for semi-scald immersion for feather removal is thermostatically controlled. Special types of pluckers are used for body and wing feather removal. Finally, the birds are singed by passing through a flame in a tunnel before being washed by mechanical sprays of water.

Mechanical evisceration equipment includes, conveyers, moving pans for giblets, saws for cutting off head and feet, washing sprays and finally, a suction pump to remove air from the bag into which the eviscerated carcass has been placed for protection while in refrigeration and being carried through the marketing process.

Mechanical refrigeration has been adopted on many poultry plants and farms to allow for the holding of the dressed product for orderly marketing over a period of time, and to handle stock dressed in off-season periods.

Many types of equipment, other than those mechanically operated, have a place in good flock management to help in doing jobs more easily and efficiently. Handling the live birds in a rough way often causes injury or upsets



In batteries, chicks may be given a good start.

the condition of the bird which, in the case of the layer, may put her off production. Such equipment as the catching crate, the flake of fencing or the catching hook all assist greatly in handling stock singly or in a group. Portable equipment always assists in the work of cleaning.

Time saved is money saved. Therefore any device which saves time, makes work easier and protects the product, is worth adopting.

"JOE BEAVER"

By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"Stripped your woodlot, eh? Don't you know the only things we can really leave our children are well-managed natural resources?"

Cheaper and Easier Tick Control

Controlling sheep ticks with new low-volume, low-pressure sprays, instead of the more bothersome dips and dusts, is being hailed by Iowa farm flock owners as the biggest thing that's hit the sheep business since prenothiazine treatment came along to knock out stomach and nodular worms.

A wetting agent or detergent mixed in the solution for low-volume, low-pressure spraying helps penetrate the wool and gets it soaked to the skin. It does away with the handling necessary with dipping. It's cheap. Sheep in some cases have been cleaned up for as little as three fourths of a cent a head. One thorough spraying gets rid of the ticks. Farm spray outfits purchased for fly or other insect control will do the job. The key to effective control by spraying is the wetting agent, which carries the chemical down through the wool into contact with the ticks. All the chemicals — DDT, benzene hexachloride, lindane, methoxychlor and rotenone — were about equally effective in Iowa tests. Hence choice of material should be made on the basis of cost, safety to lambs, residual action and effect on other pests. DDT is preferred because it costs less than any of the other chemicals, is safe and has a longer residual effect.

Rotenone is considered by some specialists as the safest material to use, but work in Iowa indicates that DDT is just as safe from a practical standpoint, even on day-old lambs. Also, the tick-killing action of rotenone doesn't last as long as that of DDT. If the chemical is not present when new ticks emerge from the "nits," control is not effective.

Benzene hexachloride, lindane and chlordane are all considered more hazardous to lambs than DDT. Methoxychlor is as safe as DDT but is somewhat inferior in controlling ticks and costs about twice as much.

DDT is used at the rate of 8 pounds of 50 per cent wettable powder per 100 gallons of water. Lindane is recommended if scab is present. It is used at the rate of 4 pounds of 25 per cent wettable powder in 100 gallons of water for mature sheep and 2 pounds for lambs. However, lambs less than three months of age should not be treated with lindane.

With a box of wetting agent added to each 100 gallons of solution, there is no need for pressures above 75 to 100 pounds. Each animal is wet thoroughly (about 2 quarts per animal on shorn sheep and a gallon on those carrying a crop of wool), making sure to get good coverage over the back and around the neck.

Treatment may be applied whenever needed. However, it is best done after the sheep are sheared. Treatment may be needed only once every two or three years once a flock is cleaned up.



We wish our readers
a Merry Christmas and
a very Happy New Year.



The
Macdonald College
Journal





Progressive farmers don't wait for information—they organize to get it.

What's Happening to the Farmer?

by J. S. Cram

WHAT are the modern trends in rural living? We might ask this question of a dozen people, and get a different answer from each. And every answer might be accurate enough, so far as it went; but the dozen added together mightn't even approach the whole truth.

How can we discover these trends in the first place? That isn't an easy question to answer; and to get an answer that's at all satisfactory we must put the accent on the word *modern*. Then we can see a basis of comparison — a type of thinking or of action that differs from the established habits of the past. A change may be made at first by just the odd person, but it isn't really a trend until a large proportion of the population has made the change.

One of the best examples of a strong trend in the history of farming followed the introduction of hybrid corn. A few people started using it, and the trend quickly developed until the use of hybrid corn was a well-established practice. In two communities in Iowa all the 257 farmers were growing hybrid corn within 10 years of its introduction; so obviously they all believed it was a good thing. But they didn't all accept it at the same time, and the story of how it came to be accepted is a very interesting one. A study of these communities was made by a couple of sociologists at Iowa State College — Bryce Ryan and Neil Gross. What they learned casts a lot of light on the earmarks of progressiveness. It also shoots big holes in some common beliefs about how new practices are spread. And there is no real reason for believing that these findings would not be just as applicable here as in Iowa.

What sort of farmer are we likely to have in a generation or two? This is a big question. But here's a report of a study that throws some light on it, by pointing out the tendencies now found in the people who are out in front.

Now for the findings of this study. In the first place, half the farmers interviewed had first heard about hybrid corn from salesmen, and 14.6 percent had first heard of it from neighbors. But none of them started to use it as soon as they heard about it — they had to be convinced it was a good thing for them. Almost half credited neighbors with the greatest influence in getting them to accept this corn, and 32% said the salesmen had the greatest influence here.

The only other media which first informed any significant number of farmers about hybrid corn were farm journals and radio advertising, with about 10% each — and their influence on actual adoption of the practice was considered slight.

Big Difference in Time

As I have said, the farmers didn't all start using hybrid corn as soon as they heard about it; nor did they all hear about it at the same time. Dividing up the farmers according to the year in which they first planted hybrid seed, they fell into four groups. In the first or A group there was an average lag of 1.6 years between the time when they first heard of hybrid seed and the time they

started using it; and this lag increased until with the last or D group it was over 9 years.

The usual observation that older people are more conservative is born out here. The early acceptors averaged 37.7 years of age, compared with 55.9 years for the last acceptors. And it was also tied up with education; some 34.7 of A group had attended high school and another 30.6% had gone on to college, while none of D had gone beyond public school. The scope of operations entered the picture, too; the average acreage of corn for A group was 108.5 acres, against 60.4 acres for D.

The researchers went on to investigate some of the other activities of these farmers, to find what sort of interests went with readiness to accept new practices, and they unearthed some interesting facts. They found that the average farmer in A belonged to three times as many agricultural and recreational organizations as one in D, and twice as many civic organizations. A attended 2½ times as many meetings as D, and was four times as likely to hold office.

Nor did the more progressive group tie themselves so closely to the farm. In a year A made three times as many trips to the nearest big city, and almost 1½ times as many to the nearest trade centre, attended 2½ times as many commercial recreational events and over twice as many fairs.

Reading Showed Biggest Contrast

The reading habits showed the most interesting contrasts of all. While A took only 1½ times as many magazines and newspapers as D, he read nine times as many library books and 11 times as many Iowa State College bulletins.

Among the points brought out by this study it shows that younger farmers are more likely to adopt worthwhile improvement in their farming practices, and that acceptance generally rises with the amount of education a man has. It also rises with the scope of his operations.

People who are active in community organizations —



National Film Board Photo.

Progressive farmers read more, are active in groups.



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particularly agricultural and recreational — and who take office and committee responsibility, are likely to be progressive farmers, as are those who are willing to break away from the farm for occasional trips to the city or to take in recreational events. Probably the contacts they make in these activities help to sharpen up their minds and bring new ideas to their attention.

The relationship of library book readership to progressiveness in farming is another telling point. That the reading helped to make them progressive farmers is a probability that appears to be born out by their heavy reading of college bulletins.

Watch Neighbours' Results

A frequent observation confirmed by this study is that few farmers like to try out a new practice until they have seen a neighbor use it successfully. So the agricultural progress of any community depends to a great extent on the presence of at least one really progressive farmer, who is willing to do a little experimenting.

As for the modern trends shown by this study, they are indicated by the habits of the more progressive farmers who were the first to adopt hybrid corn. It may be assumed that as general education improves farmers will be

readier to try out new practices which will improve returns. It also seems probable that they are becoming more inclined to join agricultural and recreational organizations and to take an active part in leading them.

Farmers who are modern in the full sense of the word aren't waiting for new ideas to be thrust on them, and then resisting. Instead, they're searching for ideas, wherever they may be found — in conversations, at meetings, in books and in bulletins — and interpreting them in terms of improved farming and living. They're organizing farm forums and crop improvement associations to discuss these ideas and put them into operation.

They're paying more attention to organizing their work to cut down labor and enable them to get away from the farm occasionally. And they're beginning to see the real value of social activities.

The most decided trend in rural life today is probably the breaking down of the barrier that used to distinguish the farmer from the townsman. An up-to-date farmer is likely to feel at ease in the company of strangers, and to be well informed on public affairs and the news of the day. And he is more likely to enjoy his family, his neighbors and life in general than was the farmer of a generation ago.

New AIC Office Opened by Governor-General

The Governor-General of Canada officially opened Grindley Hall, the new headquarters of the Agricultural Institute of Canada, in Ottawa recently. The AIC is a national organization of agriculturists employed in professional and technical work, such as departments of agriculture and agricultural colleges, and representatives from all across Canada were present for the event.



His Excellency the Governor-General of Canada speaks at the official opening of the new AIC headquarters in Ottawa. Looking on, from left to right, are C. G. O'Brien, general secretary of the AIC, W. R. Carroll of Toronto, national president; and J. C. Woodward of Ottawa, honorary secretary, who is holding a certificate of honorary membership which was presented to His Excellency.

"In opening this national headquarters of your Institute," said Viscount Alexander, "I offer you my congratulations for the fine work your organization is doing. And I hope that, with the improved facilities you will enjoy in the future, the Agricultural Institute of Canada may continue to promote with ever-increasing efficiency the practical, scientific and educational aspects of Canada's basic industry."

His Excellency went on to laud the work of the AIC, which in 30 years had "built this organization from a modest one of 417 members into a strong national body including over 3,100 agricultural workers." The opening of the new office, he said, was in itself an evidence of great progress.

"The applied work of agricultural scientists," the Governor-General continued, "is never confined to the bounds of their own country, and is seldom influenced by commercial considerations or currency restrictions. Their aim has always been the international pooling of ideas for the common good of mankind. This policy is reflected in most agricultural associations, from the world-wide Food and Agriculture Organization of the United Nations to the Commonwealth Agricultural Bureaus and the seats of learning in individual countries."

"I cannot claim, alas, to be an agricultural expert," he said, "or even a farmer. But I was brought up on the farm in my youth, and when my busy official days are over and I return to the Old Country I shall take up farming in a real, serious style."

Ponds for Profit and Pleasure

Farm ponds are becoming popular in many parts of Canada. They can provide water for livestock, fire protection, limited irrigation, orchard and crop spraying, recreation and waterfowl. A pond properly planned and maintained can be stocked with fish and become a source of food, as well as supplying sport for the family.

But not any old hole makes a satisfactory pond. A suitable and convenient location is essential; and the pond should have adequate storage capacity and a watershed of proper size to fill it. Livestock should be fenced away from it, and contaminated water should be diverted away. For watering stock it would have an outlet to a drinking tank. If it is used for recreation there should be adequate life-saving facilities. And if it is to be permanent it must be properly maintained.

Most ponds are made by building earth dams across natural waterways or depressions that receive runoff water from pasture, meadows or woodlots. It is, of course, essential to have impervious subsoil for the dam to rest on, and plenty of impervious soil for building the dam. And it is important to make the pond where it will be convenient for use.

One of the biggest causes of failure in dams is that they are too narrow, with side slopes too steep. The water side of the dam should have a slope of 3 feet horizontal to 1 foot vertical, and the lower side of the dam should have a slope of 2 to 1. The top of the dam should be 8 to 10 feet wide and at least 1½ to 3 feet higher than the bottom of the spillway.

A spillway of sufficient size is necessary for protection of the dam, serving as a safety valve by discharging excess water which would otherwise go over the top of the dam and damage it. The spillway should be protected with vegetation or masonry to prevent erosion. Usually dams, spillways and sides of the pond are grassed.

Water may be piped from the pond to a stock watering tank below the dam, which is fenced off, to save the pond from pollution and the fill from damage. A 1¼ inch pipe

laid in a narrow trench under the dam is satisfactory for supplying the tank. Lay the pipe before beginning construction on the dam, packing moist clay tightly around the pipe to prevent seepage.

A screen or a section of perforated pipe should be fitted to the upper end of the discharge pipe to keep solid materials out of the stock tank. The screened or perforated end of the outlet pipe may be placed in a concrete or clay tile or a metal barrel filled with flat stones, to serve as an additional filter.

The water level in the tank is generally controlled by a float valve; a cutoff valve should also be provided. The water tank should be set on a concrete platform and equipped with an overflow pipe.

The size of the pond depends on the water needs of the farm, the type of location, the area drained and the amount of runoff water. If the pond is to be stocked with fish it should be at least 8 feet deep at the deepest point, and at least half an acre in area. Details to consider in determining the size of the pond and suggestions on construction are given in a recent bulletin "Farm Ponds for Iowa," published by the Iowa State College, Ames, Iowa.

I.F.A.P. to meet in Mexico City

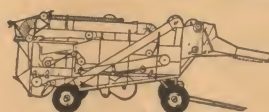
For the second time since it was organized in 1946, the International Federation of Agricultural Producers will meet on the North American continent, in 1951.

This time it will be in Mexico City, commencing May 29 and concluding June 8. The decision to meet in Mexico has been confirmed in Ottawa by H. H. Hannam, president of I.F.A.P., who states that Andrew Cairns, general secretary of the international organization, recently visited the southern city in this connection.

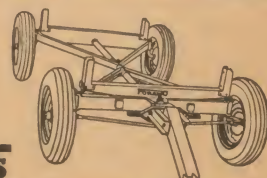
The conference will be held in the Palace of Fine Arts in Mexico City, scene of other international conferences. There will be three farm tours for delegates prior to the conference.



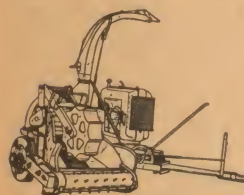
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Saving Steps in the Kitchen

A well planned kitchen can speed up work, cut down accidents, lessen nervous tension and fatigue, and generally make life more enjoyable. Here are some practical hints on how to make the best use of space. When you've read them you'll probably want to get out a pencil and figure out how you can apply them to your kitchen.

by Joyce E. Johnston and Pauline Lloyd

YOUR kitchen is your kingdom! It's where you spend most of your working hours and do most of your work; so you want it to be a pleasant, comfortable place where you can work easily and quickly.

The modern housewife wants a kitchen that will save her time and effort, reduce waste motion, lessen nervous tension and fatigue, help prevent accidents and, in the end, be a convenient, comfortable place to work.

First let's consider the color of your kitchen. It's really amazing the difference it makes in your mental attitude toward home duties, when working in surroundings that are colorful and gay. Not so long ago it was felt that kitchens must be white or cream, with little or no color interest. But now people have found that whether the sun is shining or not, a bright-colored kitchen helps no end to make daily tasks a pleasure. Such color combinations as salmon pink and soft green, or canary yellow and delicate grey, are restful and easy to live with.

In lighting, the difference between the old and the new is the difference between working in shadow and in light. The unpleasant effects of glare and heavy shadows are eliminated in modern kitchens by a corrected lighting system. The lighting can be divided into three sources: (1) general lighting, which is furnished by a ceiling



National Film Board Photo.

This farm kitchen is convenient for cooking.

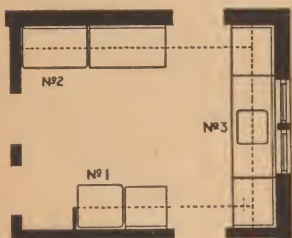
fixture proportionate to the size of the room (2) local lighting, which is furnished by lights in the cooking top of the range, inside the refrigerator and above the sink (3) work centre illumination, which is accomplished by tucking lamps under the upper cabinets, thus lighting the work surfaces while protecting your eyes from direct glare.

Now for the arrangement of your kitchen. No mere collection of equipment, no matter how fine or costly, necessarily adds up to an efficient kitchen. Unless that equipment is arranged and used properly it can lose considerable of its value.

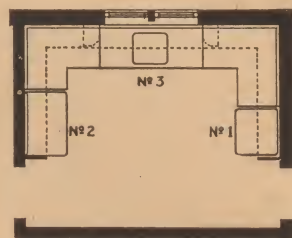
Basically, modern kitchens may be grouped into four general designs: (1) the "U" type, (2) the "L" type, (3) the "Broken L" type and (4) the "Individual Centre" type. Let's consider each of these types briefly.

In the "U" type kitchen the work centres are aligned into a complete, unbroken arrangement occupying three sides of the room, with a continuous counter from refrigerator to range. This is the most efficient kitchen design so far created.

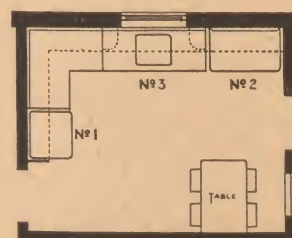
The "L" type kitchen is next in step-saving. This arrangement makes use of two sides of the room, giving



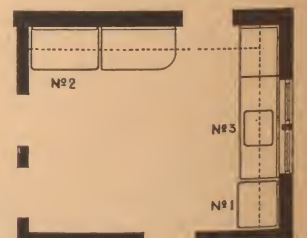
THE "INDIVIDUAL CENTRE" KITCHEN



THE "U" TYPE KITCHEN



THE "L" TYPE KITCHEN



THE "BROKEN L" TYPE KITCHEN



There are plenty of cupboards around the sink . . . and provision for relaxing and serving meals.

National Film Board Photo.

the kitchen all the advantages of a continuous work surface; yet it's adaptable to a very small room.

The "Broken L" kitchen is similar to the "L" type, but has the disadvantages of a divided work surface. The travel across a doorway, eliminated in both "U" and "L" types, adds to the number of steps and makes the "Broken L" less desirable.

In the Individual Centre plan each work centre is planned as an individual unit, separated by doors and windows. It is undesirable from a work-saving standpoint, due to the extra steps taken.

Three Major Tasks

In any kitchen there are three major tasks to perform: (1) storing and preparing foods (2) cooking and serving foods and (3) cleaning up. These tasks may be handled most effectively if the kitchen is planned around three major work centres: (1) the refrigerator and preparation centre, (2) the range and serving centre and (3) the sink and dishwashing centre. The organization of each of these work centres is vitally important to the smooth operation of a kitchen as a whole. Food supplies, utensils, equipment and dishes must be grouped and arranged properly in each centre, or the kitchen will lose much of its efficiency.

Now, all of us know that in preparing meals we start with staple and perishable ingredients. These are stored in the refrigerator and in storage cabinets immediately around it. The location of the refrigerator is very important, and it should be near the entrance door so that food may be stored in a step-saving place. You must also have adequate work surface next to the refrigerator, with base storage cabinets below it. This arrangement enables you to remove food from the refrigerator and place it

on the work surface without wasting a single step. The base cabinets should have ample shelf and door capacity for baking pans, beaters and sifters, and other food preparation tools.

Next we come to the sink and dishwashing centre. It is generally agreed that this centre is most efficient when close to the refrigerator and preparation centre, for easy cleaning of foods before storage. It is a good idea to install the sink beneath a window with a pleasant view.

In many modern kitchens an automatic dishwasher is part of the sink unit. Today's dishwashers are reliable, and actually wash dishes clean. Another appliance sometimes included in the sink and dishwashing centre is an electric garbage disposer. With this appliance you may get rid of all food leftovers and waste, merely by scraping them down the drain, whereupon they are ground to a pulp and flushed away.

A cabinet on each side of the sink provides work surfaces which, combined with the surface of the dishwasher when not in use, are ample for the needs of any occasion. In these cabinets go dish and hand towels, breakfast linens and napkins, cleaning implements, long storage vegetables like potatoes and onions, and also small items. The space underneath the sink is ideal for keeping your soaps and detergents, cleansing powders and brushes.

On either side of the windows above the sink, cabinets are installed. One on the left can take bright-colored pottery dishes to blend with your color scheme, and the one on the right may be used to store such items as mixing bowls, pie plates and muffin tins.

The Sewing Centre

Lastly comes the range and serving centre, which is best on the wall nearest the dining room. The range is one

of the appliances most vital to an efficient kitchen. It must be in a place where it is easy to get at, with sufficient work surfaces and storage cabinets around it. The work surface beside your stove should be covered with heat-resistant material so that you can put hot dishes on it without fear of damaging the top.

The base cabinets underneath the work surface should contain cutlery and cooking tools, frying pans, strainers, canning equipment and serving bowls. Wall cabinets above your work surface can hold an assortment of other equipment, and ingredients used in every-day preparation of meals. The lower shelves could contain tea, coffee and the appliances necessary for making tea and coffee. And a shallow cabinet above the range should contain all the dishes required for serving — platters, vegetable dishes, gravy boats, even dishes for leftovers — and appliances such as a toaster and waffle iron.

Now that your kitchen is shaped and equipped for efficient work, let's consider the wall and cupboard finishes. These should be a semi-gloss paint which has a non-glare finish, and is easy to wash and keep clean.

For your floor covering, choose one that is easy on your feet, that won't show dirt — and here a mottled pattern is recommended — and most important, one that washes with ease. There are many such varieties on the market today, in most attractive colors.

New Farmers' Market for Toronto

A new Farmers' Market at the Ontario Food Terminal in Toronto will be ready for business about May 1, 1951, according to an announcement from G. F. Perkin, Chairman of The Ontario Food Terminal Board.

Mr. Perkin states that when completed, the Ontario Food Terminal will provide one of the most efficient and economical establishments of its kind on the continent. Present plans for the Farmers' Market include accommodation for some 400 trucks, ample provision for parking and selling aisles, and for as many more buyers' vehicles. In addition there will be room for future expansion. For the first year or two, selling aisle accommodation for 80 trucks will be covered with a steel canopy 440 x 60 feet as protection for those using the market in the winter. If there is sufficient demand and this type of roof proves satisfactory, more of the selling aisles will be covered.

Plans for the other sections of the Food Terminal include two produce buildings and a large cold storage, as well as office accommodation for those who carry on their business at the Terminal. All of the facilities are being designed to provide the opportunity to use modern warehousing and handling methods in the most efficient way possible.

Who Should Pay for Soil Conservation?

The farmer and the government should share the costs of soil conservation measures. This was the opinion expressed by 62 percent of the 879 Farm Forum groups that met to discuss the National Farm Radio Forum topic, "Who Should Pay for Soil Conservation?"

The government should pay, said 17 percent of the Forums. Another 12 percent said the farmer should bear the expense himself. Only 4 percent, all in Eastern Canada — claimed that soil conservation measures were not needed in their communities. The remaining 5 percent of the Forums were uncertain, had divided opinions or did not answer.

Some of the groups that thought the cost should be shared by farmer and government, stated that the farmer should pay for projects on his own farm and the government should pay for large-scale projects. A number of Forums thought the government should make available soil survey services, free technical advice, and heavy machinery such as bulldozers. All levels of government were indicated as being responsible for soil conservation assistance.

The Forums suggested that public support for soil conservation projects could best be secured by the farmers themselves through group efforts, and by educational programs such as films, Farm Forum discussions, demonstrations, and publicity in general.

"It must start with the farmers themselves, getting together as in a forum and discussing the problem," said Little Shemoque Farm Forum in New Brunswick.

"We think the only way to gain support for projects of this kind would be through education of the people through literature, films, newspapers and any other means available", was the opinion of Emerald Forum, Saskatchewan.

Forecasts Barnless Dairying

"The day will come when not a single cow will be tied up in a barn for milking," Hon. T. L. Kennedy, Ontario minister of agriculture, said in an address to the Oshawa Rotary Club. Instead, milking will be done in milking parlors in the fields and this will save time and money, Mr. Kennedy predicted.

There have been more changes in agricultural methods during the past 15 years than during the previous 100 years, he said.

"At one time the binder was thought to be an impossibility but today we have the combine," he commented. "Some say it is the last word in farming, but in my opinion it will be replaced by something better."

Making Woodlots Pay Off

FARMERS are not satisfied that they are getting the returns they should from their woodlots. That is clearly shown by the answers to a farm forum question on woodlot management.

Many forums stated that woodlots could be improved by fencing cattle out, to give young trees a chance; many suggested cleaning out dead or unsound trees, to make more room for healthy growth; and others mentioned selective cutting.

Since farmers consider these things desirable, why have they not done them? Often because they have been unable to, without doing something else first, or getting outside help.

Let's consider the question of fencing cattle out of woodlots, suggested by over half the forums in Quebec. Usually the cattle are allowed in there to get what grazing they can pick up, because their other pasture is inadequate. So, before fencing the cattle out, it's necessary to provide better pasture elsewhere. Often this could be done by fertilizing fields and seeding them down with good forage mixtures. But it does involve some initial outlay.

The farmer has to dig into his pocket, too, to pay for fencing materials. So he's likely to think twice about making these expenditures unless he's sure that the extra returns will more than cover the cost of pasture improvement and fencing. And he can't wait a generation for those extra returns. So, before he can fence out his cattle he has to have a pretty definite idea of just how he can step up his returns in the near future.

This problem has been tackled in parts of the Gaspé by farmers banding together in wood-cutting co-operatives, big enough to buy the equipment needed for economical use of labor. They are able to cut their wood at lower cost; and by selling in bulk lots through

collective bargaining they are able to get a better price for it. As a result, each farmer has more to show for his wood and his work.

Some of these co-operatives have gone even further, and set up their own sawmills, which has enabled them to keep the net returns from this operation, and has considerably boosted the amount per tree returned to the farmer. As the next logical stage such co-operatives might band together to market their products through their own retail lumberyards, and get the full price the final buyer has to pay for lumber.

These ways of increasing the return for trees could provide the means for better management to increase yield and improve quality of timber. Farmers with their pastures built up could fence their cattle out of their woodlots and go ahead to clean up their bushes, removing dead and diseased trees. Then they could try to increase the regular returns through selective cutting.

But how many know just what is meant by "selective cutting?" The members of the Sutton Junction Farm Forum, for instance, wanted to try it, but didn't know how to proceed, until they got Ellwood Wilson, a forestry consultant, to show them exactly what they should cut and what they should leave, to give the best perpetual source of income. After his on-the-spot demonstration it all seemed much simpler.

This system of expert demonstration would be just as effective in most sections of Eastern Canada. But there's a catch — there aren't nearly enough Ellwood Wilsons to go around. Forestry experts of any kind are rare in farming districts, and there is almost no provision for demonstration of efficient woodlot management.

A welcome solution to this problem would be the appointment of county foresters. But such appointments aren't likely to be made overnight. There's



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a big dearth of men with suitable training, and even if a good woodlot policy were instituted right away, it might take several years to train enough men to meet the need. However, it's certain that no such appointments will ever be made unless there's a keen and vocal public demand for them.

Nor do co-operatives spring up by themselves. They must be organized by people who have enough belief in the need for them, and enough information on how they operate, to convince their neighbors they should get behind the movement. That takes a lot of study and a lot more effort; but it has been done in places, and it could undoubtedly be done anywhere else there is a real need for woodlot improvement.

In the meantime every farmer could increase his returns by improving his pasture so that his cattle can get along without foraging in his woodlot, by cleaning out the deadwood, and putting into practice what he can learn from publications on the subject.

A couple of good ones are "Practical Woodlot Management," published by the Canadian Forestry Association, Montreal, and selling for 35 cents, and "Woodlots," published and distributed free by the Royal Bank of Canada. Both are full of practical information, and would be very helpful to any farmer with a woodlot.

County Controls Cutting

Halton county council in Ontario has passed bylaws prohibiting the cutting of trees under certain minimum sizes, and pays a subsidy of \$50 to farmers who guarantee to keep their cattle out of their woodlots as part of an extensive conservation scheme.

The county council's committee on agriculture and conservation has co-ordinated the efforts of several organizations including the Crop Improvement Association, the county Federation of Agriculture, the Plowmen's Association, the county Tree Commission, the Sportsmen's Association, the Milk Producer's Association and several lumbermen.

Under the central committee major reforestation plantations were begun in 1941 and this year 32,000 trees were planted on marginal land.

Keep Stock Out

A livestock and poultry-tight fence around windbreaks is essential to keep animals and poultry from opening a door that will let frigid winter winds come through.

Livestock and poultry can wreck a good windbreak. By killing just a few trees in a three-row windbreak, they can make the planting ineffective.

Chickens pick off new buds and expose tree roots by digging out dust baths at the foot of the trees. Geese will completely strip young evergreen foliage.

Two new credit union books are being published by Harper and Brothers on January 3. The 5,000 sets of these books being distributed by CUNA Supply Cooperative will be first released, about a month ahead of the regular trade supply.

The publication of these books marks the third notable milestone in credit union history reached in 1950, in the judgment of credit union leaders. The first was the completion last May of the international headquarters of the movement in Madison, Wisconsin, with the President of the United States laying the cornerstone. The Desjardins

Woodlot Co-operative

Considerable success has attended what is believed to be the first co-operative woodlot program organized by farmers in any area in Ontario, a project set up in Lanark county by a number of farmers who are owners of substantial woodlots. The first woodlot management demonstration day was held by these farmers on November 3. The co-operative woodlot project was organized for the purpose of promoting on a co-operative basis the better management of the farm woodlots by proper logging to ensure a continuous crop of the best material. The co-operative will arrange with log buyers for sale of the products of the members' woodlots.

Won't Supply Co-ops

Co-operatives in Canada have felt the pressure of monopoly control when manufacturers have refused to supply them with goods which are available to their competitors, the Co-operative Union of Canada stated in a brief presented to the special House of Commons committee which is at present studying the Combines Investigation Act.

Co-operatives have found difficulty in obtaining supplies of cement, steel products, ammunition, textiles and tobacco, the brief said.

Two Outstanding Books

50th Anniversary Celebration at Levis, Quebec, in August marked the second.

Of special interest to Canadians will be "The Poor Man's Prayer," by George Bayle. This is a fictionalized biography of Alphonse Desjardins, who after much physical and spiritual travail introduced credit unions to the North American Continent in 1900 at Levis. The author is an instructor at St. Francis Xavier University, where he graduated and is a prolific contributor to newspapers, magazines, and professional journals, as well as the author of several books.

"Credit for the Millions," by Richard Y. Giles, is the more general treatment of the financial exploitation faced by working people and what credit unions are doing about it.

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DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Quebec's Farm Contests

by A. Auger

Since 1928, 192 contests have been organized, in which 5,572 farmers have taken part.

The policy of the Quebec Department which is known as the Farm Contests (Concours de Fermes) is a type of competition which is open to a selected group of farmers in any given county; the participants are chosen by the county agronome, not necessarily from among the best farmers in the county, but rather from among those who are genuinely interested in improving their farming methods by learning to use the best cultural methods. Every farmer who takes part in one of these five-year plans agrees to operate his farm in strict accordance with the instructions that are given him by the Department experts during a five-year period.

For many years Quebec agronomes have been working in close collaboration with agricultural societies and other farm organizations, passing on to the farmers who make up the membership of these organizations the latest information at their disposal on farming practices. The role of the agronome is, of course, to try to keep farmers in touch with the latest developments, with the ultimate aim of helping them to get more revenue from their crops and livestock herds. No agronome can be expected to visit every farmer in his district individually; he must work with groups, and in co-operation with organized farmers' societies. But no matter what organization he works with, he never loses sight of the fact that it is his job to be continually on the lookout for means which will help the individual farmer to increase his crop yields and his herd production, always without endangering the fertility of his land.

In an effort to accomplish these ends, Quebec agronomes for many years worked, in close collaboration with the agricultural societies, organizing crop competitions and county exhibitions. During this period this was the chief form of contact between the agronome and the farmers. These activities helped to introduce better varieties of grain crops, and extended the use of root crops and forage corn. Later, by the use of demonstration fields, clover and alfalfa production was encouraged, and the use of lime and chemical fertilizers was increased markedly.

Next came the organization of demonstration farms, which marked an important stage in the development of agriculture in Quebec Province. Until that period it had been possible to arrive at the money value of a certain

crop; but enough attention had never been paid to the problem of the organization of the farm as a whole. Under the new scheme it became possible to pay attention to more than one isolated field; rotations appropriate to the district and to its soil conditions could be taken into account and thought could be given to every crop. The whole object of the plan was to arrive at means of growing more feed (pasture, hay, silage, root crops and grain) so that more livestock could be carried and so that it could be fed better.

Now, better organization and rotation of crops necessitated improvements in drainage, and called for higher fertility, achieved by better and heavier applications of manure, lime and chemical fertilizers; and it was not long before crops began to show improvement, proving the value of the plan. With more feed being raised, and better feed at that, it was found possible to carry a larger dairy herd and to increase production of the individual cows in the herd. Along with this, hog production was increased and so was the output of eggs from the poultry flocks. The end result was higher profits, even when the farmer had to borrow money at the start.

Farmers who came to the field days which were held on the demonstration farms were quick to admit that great changes had been made and improvements accomplished; but they went away with the feeling that they



Good pastures mean better livestock.

could have done the same if they had been the ones to receive all this help from the government. And, as a matter of fact, the grants that were given to the owners of these demonstration farms were very substantial, in the first years of the plan. But the results obtained on these demonstration farms were so conclusive that after seven or eight years the Field Crops Service of the Department of Agriculture decided, in 1927, to extend the policy. However, it was expanded in a different form. Grants were limited to \$20.00 per year for a period of five years and the programme was called the Farm Contests. The first trial of the new policy was made in Champlain county in the summer of 1927.

How It Works

As pointed out earlier, the choice of just who shall take part in the contests is made by the county agronomer. Once he has made his selection, these farmers are invited to a preliminary meeting, at which general information and instructions are given by the Field Crops Service fieldman. Later, the fieldman and the agronomer call on each farmer individually and draw up a plan of his farm. Voluminous notes are taken covering the different crops he is growing, how much of each, how many cows he keeps, how many hogs, hens, etc.; the same information is taken for all kinds of products. Information is secured about the labour available for farm operations, and on how fertile his fields are. From all this information a system of rotation that will fit his farm is worked out.

Next, a new farm plan is made, and on this one the fields are re-planned and re-located where necessary, and at this stage the field which will be made the start of the rotation is selected. Recommendations are decided on for drainage, summer working, use of lime and chemical fertilizers, and, in fact, every precaution is taken to make sure that this first field will be given every chance. Theoretically, a cultivated crop is sown in the first year of a rotation, but actually, in these contests, cultivated crops are very rarely used, due to scarcity of labour and of manure on the farms. Instead, any part of the field that is not in a cultivated crop is seeded to grain. The most important cultivated crops are forage corn, in districts where this can be grown successfully; potatoes, if they fit into the regular rotation; turnips or sugar beets. If flax is grown on the farm, it goes into the first year of the rotation, and so does buckwheat. Heavy applications of manure are recommended for the cultivated crops, and it is also recommended that manure be applied on clover aftermath, whenever possible.

This is the broad outline of the programme for the first year of the rotation, and the details are given to the farmer the summer before the work is due to start, to give him time to buy any lime and chemical fertilizers he may need. It also gives him an idea of how much seed of the various recommended varieties he will need to purchase.

Officially, the contests start on January 1st, and from then until the 31st of the following December the farmer is required to keep a record of every purchase and of every sale made on account of the farm. These records are kept in books supplied by the Department, and, when properly kept, will show exactly how much net revenue came in during the year from each section of the farm; which sections are making money and how much; which sections are losing money; in brief, they give the farmer an accurate picture of all his operations. This bookkeeping, of course, should be done on every farm, whether entered in the contest or not, and it is done on a great many. But in the case of farms entered in the Farm Contest, it is a strictly enforced condition of entry.

Coming back to the organization of the farm, which we left at the stage of the first year of the rotation, the next thing that the agronomer must do is to see that the programme that was suggested is put into operation, and to see that preparations are made to put the second field into condition by draining, liming, and fertilizing.

At the end of the first year the field is usually fall-plowed. The following year it is seeded to oats, barley, or a mixture of oats and barley with grass crops. Ordinarily, no manure, lime, or chemical fertilizer is put on the grain field.

During the first two years, the farmer has had to make fairly substantial cash expenditures in his programme of improvement, and no returns from this investment can be realized at least until the third year. This is one reason why it is so important that a good crop of legume hay be obtained in the third year.

By the third year of the contest the farm contains one field in a cultivated crop, one in grain, and one in hay. This third year is the most important, from the owner's point of view, because he now realizes that, for the first time, his crops are all in good balance, and this often proves to be the first year that he has ever had a really good hay crop since he started farming.

The rotations recommended are either four-year or five-year ones; this assures one field of legume hay and one of mixed hay every year. In the five-year rotation, one field is used as pasture; and as far as possible this is semi-permanent pasture, that is, after having received the appropriate treatment, it is kept in pasture just as long as it produces satisfactorily. No matter what the rotation, every field gets the same treatment the first year it goes into the rotation, and at the end of the five-year period all crops are in good balance, so that they can supply the feed needs of the livestock that the farm carries. Yields of hay and of grain vary only slightly from one year to another, because all the fields are either of the same size, or else have been adjusted in accordance with the fertility of each.

Handling the Pasture

Pastures get more attention nowadays than they did in the earlier days of this policy. Ladino clover appears to be becoming more and more popular; it is seeded with oats, which are grazed several weeks after being sown, and very good results have been obtained. More information, through more experimental work, however, will have to be obtained before this practice can be recommended for the whole province. Extensive winter-killing which occurred last winter has raised doubts as to Ladino's hardiness.

We have been accused, in some quarters, of not being grass-farming minded. Our reply is that, after 25 years of experience in managing farms, we are still of the same opinion — that, under our weather conditions, our present total pasture and meadow acreage should not be increased. Sufficient rainfall, and particularly, proper distribution of rainfall during the growing season, are the chief factors which determine yields from pastures and hay fields.

Three-fifths of the total cultivable area of the province is in pasture and in hay. And even though we advocate the use of grass silage as a general practice, we do not suggest that the acreage devoted to grass be increased. Rather, we urge the use of methods that will increase yields and quality on the existing acreage. And these ends can be attained by short rotations, which spread the risk of loss. For example, should the first year pastures be badly winter-killed, we will still be practically certain to save the second-year hay crop. The necessity of seeding one-fifth of the total area each year appears at first thought to be an expensive practice, but we are convinced that this is the cheapest method of getting good yields of high-quality hay. Our whole object is to get more feed from each acre of land without damaging the soil. With more feed in the barn it is easy to increase the number of head of livestock that can be kept; and this will result in more manure for the fields.

What Has Been Accomplished

In the twenty-odd years since these contests were started, 5,572 farmers have taken part; and we should not anticipate any startling results when analysing the results obtained from so many farms, operated all over the provinces and under very dissimilar circumstances. Especially must it be realized that all farmers involved were just beginning to make improvements to their farms and their farming methods. Also, it might be added, weather conditions in some years were very unfavourable, which had an effect on average results.

It is hardly correct to use farm income as a measure of the improvements which have been made, for prices of farm products have varied widely during the years under consideration. More significant figures are obtained by comparing yields as between the first year and the



A reasonable balance between hay and grain is essential. final years of the contest, even though these yields are averaged for a large number of farms, and cover different periods.

On the average, yields on farms entered in the Farm Contest increased during a five-year period; 4 bushels for oats, 4.8 bushels for barley and 9 bushels of mixed grain per acre. The area in grain crops increased by 3.2 acres per farm and the average increase in grain production per farm was 204 bushels.

But this increase in grain production was not made at the expense of hay. During this five-year period, acreage in hay increased to the extent of 1.3 acres per farm, and yields increased by 0.6 tons per acre.

The question that is bound to be asked: "Where did this extra land come from?" Obviously, it came from the pastures. There are no exact figures on this point, but it is evident that the area of pasture per head of livestock has been reduced, through fertilizing and seeding. I am of the firm opinion that the best way to handle grass-land farming is to increase yields from hayfields and pastures. In these contest, the increased yield from the hay crop has been 47.5%, and there has probably been a still greater increase in quality.

A farm can be thought of as a piece of land on which certain products are grown for sale; fruit farms, or the wheat farms of the Prairies, are examples. In Quebec, however, most farms are small, self-contained units on which crops are grown for the purpose of being transformed, by livestock, into other products — milk, pork, mutton, eggs. The best way to arrive at the value of farms of this type is to establish their carrying capacity in terms of animal units, the crop yields of the farm, and the revenue that comes in from the livestock.

At the outset in our Farm Contests we found that it required 3.8 acres to carry one head of livestock; by the end of the five-year period, this was brought down slightly, to 3.3 acres. These are averages, of course; on some farms, less than 3 acres were required. These reductions did not come about simply because more feed was bought;

for the most part, they were achieved by increasing the yields on the farm itself. The number of head of livestock that can be kept on any one farm depends upon the quality of the hayfields and pastures of that farm. We encourage grain production in every way possible, but home-grown grains will never be able to supply all our needs, particularly on farms where intensive production of hogs or poultry is practised. As we said above, we look on the farm as a unit, on which each section must produce as much as possible, so that the farmer can keep the maximum number of head of livestock and feed them properly.

It is not possible to make any significant improvement in the quality of the feed grown during the first two years of the contest. First year pastures can be improved by fertilization, but it is not until the third year that any improvement can be expected in the hay crop. It often happens that, during the first years, the livestock herd is reduced in numbers through the sale of unprofitable cows, and in these cases we recommend that one or two good heifers and a young bull be bought. This new stock reaches maturity at the same time that the farm is beginning to produce abundant feed.

Thus, as the productivity of the hayfields and pastures increases, the size of the herd can be increased. After five years of the contests, the farms entered averaged one cow more than at the beginning, and milk production per cow increased 537 pounds, an average increase per farm of 17.2% Hog production increased 43% and egg production 75%.

All these figures are averages, arrived at by taking results obtained on 930 farms in the first year of a contest, and on 898 farms that had reached the fifth and final year. In individual cases, of course, if particular farms were chosen on which striking results were obtained, much more impressive figures could be quoted.

The table below gives some yield figures on the 900-odd farms in the contest, as compared with yields for the province as a whole.

CROP YIELDS		
	Farm Contest Farms	All Quebec
Oats	33.4 bushels	24.8 bushels
Barley	29.5 "	23.1 "
Mixed grain	35.4 "	25.7 "
Hay	1.8 tons	1.4 tons
Forage corn	11.2 "	8.8 "

The value of these contests seems to be clearly indicated by the figures above, and the increases shown there were brought about by a programme of planned improvements based on soil care which enabled the farms to produce more and better feed; and through this programme, the number of head carried can be increased in proportion as the productivity of the land increases and as more feed becomes available. With the resulting larger amount of manure, supplemented by chemical fertilizers, it is easy to maintain the fertility of the soil, and to increase it.

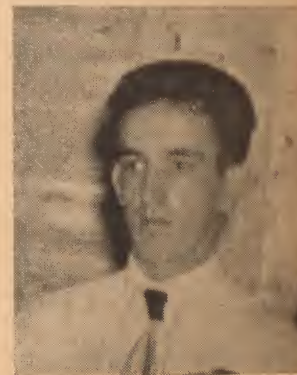
The results that have been obtained during the five year period that each contest covers are convincing; and still better results could be recorded were it possible to continue the programme on the same farms for a second five-year period, after the costly, initial changes had been made and paid for. However, this cannot be done, for we must get another group of farmers into the plan every year, so that they may receive the same benefit. The numbers of farms that can be entered in each contest is limited, but this is only because better results can be obtained by using a relatively small group, which gives us time to supervise the programme properly.

With The Juniors At Toronto

Quebec's junior farmers went to the Toronto Royal with high hopes, and, although they didn't manage to annex all the championships, they were in there trying every minute. The only team that placed first in the contests was the Garden Club team of Jean Guy and Jean Paul Cote of Neuville, but Solange Fernet and Lucie Toupin of St. Cuthbert came second in the Foods Project, Quebec teams placed third in two other classes; Normand and Luc Berthiaume of St. Elzear in the Poultry Project, and Douglas Page and Edgar McCurdy in the Beef Cattle Project.

In the Dairy Cattle Project the Ontario team of Molly Bennett and Mary Armstrong won handily, and other Ontario teams took the Swine and Seed Grain Projects. Alberta won the Clothing and Food Projects, Saskatchewan the Beef Cattle Project, Manitoba the Poultry Project and British Columbia the Potato Project.

In spite of the fact that, as a team, the Quebec boys placed only fourth in Dairy Cattle, Maurice Proulx of Baie du Febvre was the high individual scorer in this project.



Maurice Proulx

The six-day programme was sponsored by the Canadian Council on Boys' and Girls' Work, and from start to finish there was never a dull moment. As a change from the strain of preparing for the contests, the boys and girls spent one evening dancing to the music of Mart Kenny and his Western Gentlemen, another at the Ice Capades, and were entertained by John Fisher, the CBC's Roving Reporter, who gave them an hour's talk on citizenship and the unlimited opportunities in Canada. The week wound up in Ottawa, where they were received by the Governor General and Lady Alexander, had lunch with Dr. Taggart, and went for a swim in the Chateau Laurier pool.

A new feature of the entertainment provided this year were the "Breakfast Banquets", which, in addition to being a lot of fun, provided excellent opportunities for the juniors to get practical experience in conducting themselves in public, since they served in turn as chairmen, announcers, introducers of speakers, etc. Much of the planning of activities for the week was done by the Junior Council, a committee made up of nine girls and boys, one from each province represented, which met several times during the week.



Edgar McCurdy and Douglas Page placed third in beef cattle judging at Toronto.

As usual, the two railways provided free return transportation for every club member who went to Toronto, and the Industrial and Development Council of Canadian Meat Packers, and the International Harvester Company of Canada each sponsored tours, banquets and entertainments. The Massey Harris Company provided a noon lunch, preceded by a tour through their new combine assembly plant. Representatives of the Ontario Fruit Branch met the members on their return from a trip to Niagara Falls and distributed apples.

National Club Week, a great co-operative effort, is an example of how much can be accomplished through teamwork that could never be done by individual effort, and representatives of both business and agriculture join to make this unique national event possible.

The Farm Census

The usual counting of livestock is going on, and other information about our farming business is being collected. In this province the work is done by the Provincial Bureau of Statistics, working in collaboration with the Federal government, and the forms have already been distributed.

These figures are important sources of information for the Bureau of Statistics, but the reports that the Bureau draws up will be only as accurate as the figures given by each individual farmer when he fills in his form. The information asked for should be given fully and accurately, and the form returned to Quebec with the least possible delay.

These figures have nothing to do with income tax; they are seen only by the officers of the Bureau of Statistics, and are strictly confidential.

Courses Given In Poultry Grading

The Quebec Department of Agriculture, collaborating with the Federal Poultry Division, the Youth Aid Service and the Labour Department, put on a series of courses in poultry grading early in November. Some thirty young farmers from poultry-raising centres of the province took advantage of the opportunity to learn the techniques of killing, grading and packing of poultry products, and to come up-to-date on the grading regulations. Lectures and practical experience were given in the Abbatoir Sylvain Inc. in Quebec City.

Next fall these young people will be employed, under the supervision of the Federal authorities, as graders at Frampton, Standon, St. Adelphe, St. Bruno, La Malbaie, Baie St. Paul, Maniwaki, Messine, Ste. Louise, St. Damase and Abitibi. Each of these stations handles anywhere from 50,000 to 350,000 pounds of poultry meat in the season, 80% of which is turkey. All this must be handled under government supervision, hence these courses to train men to take on this work.

Instruction was given by L. J. Maltais and J. A. Lahaye, Federal inspectors, and R. Painchaud of the Quebec Department.

Testimonial To Poultry Leader

Mr. W. A. Brown, retired Chief of the Poultry Marketing Services for the Federal Department of Agriculture, was honoured by the poultry industry at a recent meeting of the Quebec Poultry Industry Committee at the Mount Royal Hotel in Montreal. He received a suitably inscribed Certificate of Merit, Mrs. Brown was presented with a bouquet of red roses, and, for their home, the Committee presented them with a most beautiful sample of French-Canadian craftsmanship, a large petit-point Canadian scene made especially for the occasion by one of Quebec's outstanding handicraft artists.

Our photo shows Mr. and Mrs. Brown, flanked by Mr. Jacques de Brion and Prof. W. A. Maw, co-chairmen of the Committee.



Quebec's Breeders Did Well At The Royal

Breeders from the Province of Quebec exhibited almost 125 head of Ayrshires at the Royal Winter Fair, and the list of awards they won proves that they had quality as well as quantity. The chief awards won were:

1. First prize in the Inter-provincial herd class.
2. Senior and grand champion female — Bonnie Shade Pretty Girl for Wyman MacKechnie & Sons.
3. Premier breeder and premier exhibitor awards won by Burnside Farm, R. R. Ness and Sons.
4. Junior champion bull — Woodlea Royal Ivanhoe for W. Ersking Rodgers.
5. Junior champion female — Burnside White Feature for R. R. Ness and Sons.
6. The Lessnessock Challenge Trophy for the best dairy herd, won for the third time by Wyman MacKechnie and Sons, who take permanent possession of the trophy.
7. The Carnell Challenge Trophy for breeder's herd, won by R. R. Ness and Sons.

Ayrshire breeders exhibiting at the Royal were J. G. Wilson, St. Valentin; R. R. Ness and Sons, Howick; S. Wyman MacKechnie, Wyman; Mrs. A. Skinner, Senneville; Estate G. T. Dagg, Shawville; P. D. McArthur, Howick; J. P. Bradley, Lachute; R. Pigeon, Vercheres; H. M. Jacquays, Sutton; E. McOuat, Brownsburg; Erskine Rodger, Lachute; J. H. Black, Lachute; Gerald A. Roy, Howick; Henry Wallace, Athelstan.

One of the Eastern Townships's best Jersey herds was on view, Miss Speyer's entries taking the junior female championship, and firsts, thirds and fourth prizes in other classes.

In Canadians, O. A. Fowler had the grand and reserve grand champion bulls, reserve male junior, while Ernest Sylvestre had the champion junior male. In females, Leon Girardin of Yamachiche and Ernest Sylvestre took the junior championships, and Fowler and Sylvestre divided the honours in the grand and reserve grand classes. Fowler took the group classes.

Glen Ayerst Farms of Ormstown carried Quebec's colours in the Holstein classes; they were the only ones showing this breed, and entered in only a few classes, taking a fifth in the aged bull class.

All the Quebec livestock entries took part as a group in the cattle parade, with Deputy Minister of Agriculture Rene Trepanier acting as master of ceremonies.

In the poultry classes, two co-operatives, Quebec West and St. Damase, showed excellently-prepared exhibits. In the interprovincial competition for dressed poultry, the Quebec West Co-op took two firsts for boxes of 12 fryers, Special and Grade A, and one fifth. The St. Damase Co-op took a second and a third for dressed capons.

Hector Girard took two seconds for honey, one in a class of 32 exhibits of 12 jars of white honey, the other in a competition open to exhibitors from Quebec, Ontario and the Maritimes, for one-pound containers of liquid honey. Claude Girard, Quebec's Honey King, took a sixth prize in an exhibit of 35 entries.

Demand For Central Market Repeated

Minister of Agriculture Barre stated last month that the Provincial Government is prepared to undertake its proportion of the cost of building a new, central farmers' market in Montreal, but remarked that nothing could be done until an official request for financial assistance was received from the other interested parties. Speaking at the annual meeting of the Montreal Market Gardeners' Association, he emphasized his conviction that such a market must remain free from Government control, being managed and operated by those for whom it was built. In this way, the growers, wholesalers, retailers and consumers would all be working in each other's interest.

Completion of the market will depend on co-operation between the Federal and Provincial governments, the City of Montreal, and the growers themselves.

Better Returns From Registered Seed

Because of adverse weather conditions in 1950, officials of the Department of Agriculture, Ottawa, point out that much of the registered and certified seed will likely be graded "Registered No. 3" and "Certified No. 2," mainly owing to discoloration. Prospective buyers of seed should bear in mind that even the lowest grades of registered and certified seed are of selected seed stocks which have been well processed and which offer more reliability than the top grades of general commercial seed.

Registered and certified seed are selected seeds of recorded pedigree, which have been tested for purity as to variety, freedom from weed seeds and other kinds of seed, and have been inspected, graded and sealed in closed containers by an inspector of the Department of Agriculture.

Red Clover Seed Short

Ontario's crop of red clover seed is very short this year, chiefly due to heavy winter-killing, aggravated by most unfavourable weather conditions at harvest time this fall. The situation in Quebec is just about the same as in Ontario.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Denmark

by Lucille E. Thomson

Lady Nuttall and I arrived in Copenhagen at 2.30 a.m. on Saturday, September 9th. Members of the Danish Joint Committee were at the station to welcome some 20 A.C.W.W. delegates. We checked in with the registrar, were allotted our hotel rooms, or were introduced to our hostess, and so a very weary delegation were on their way to a warm room and bed.

Both Lady Nuttall and I were very fortunate to be quartered in homes near Christiansborg. My hostess was charming and did everything to make me feel "cozy." Both she and her husband spoke English, so I really didn't learn any Danish at all, except "Tank."

On Saturday night my hostess, Mrs. Berthelsen, who was head of the Danish Reception Committee, and I walked to Christiansborg to attend opening meeting, a sort of get together, and to register.

Everything was very well organized by the Danish Joint Committee; and in no time at all I had registered, bought tickets for the entertainment, arranged for a two days tour. and changed a traveller's cheque — all in the same large hall. Then we visited the beautiful Parliament

Building, and in so doing got a general picture of where we would be holding our meetings during the week.

Sunday morning I accepted an invitation to a picnic lunch at a summer villa at Taarback, a few miles up the coast from Copenhagen. It was a perfect September day and my first introduction to the Danish countryside by daylight. It is a beautiful ride by train from Copenhagen to Taarback, where my hostess for the day had her country villa. This part of the coast bordering on Oresund Bay is the summer resort area for the people of Copenhagen. All these villas, hundreds of them, are of brick; some red, some washed pale blue or yellow, located in beautiful grounds. Most of them have hot water heating and plumbing. During the war many people lived in these villas all the time, only three quarters of an hour from Copenhagen.

After a typical Danish lunch, open faced sandwiches, fruit and coffee, eaten out-doors, we sat around and talked for a while, then we walked to a bus stop and motored to a place called the King's Deer Park. Here we saw how the Danes manage their forests. In Denmark



The Canadian Party. In the background the Assembly Hall, Christianborg, where the meetings were held. Mrs. Thomson, provincial president is at the extreme left.



**Mrs. Raymond
Sayre, Ackworth,
Iowa, A.C.W.W.
President.**

**An informal
pose in front of
one of the buses
used in touring.**

I noticed that few trees grew in fields the way they do here; ditches are free of any brush growth, but you do see large forests — straight trees of all sizes but no fallen trees or brush. I was told that only trees of a certain girth were cut. A most enjoyable day and one that I will long remember.

On Thursday afternoon, Lady Nuttall and I were driven around Copenhagen by Mr. Eric Jepsen (Lady Nuttall's hostess' son) and saw, after luncheon at a famous Danish Sandwich Restaurant, the cemetery where members of the Danish underground are buried, the "Mermaid," famous statue on the water front, the King's Palace, St. Alban's English Church built in 1885, and a marvellous fountain, "Gefion Fountain" representing a woman "Gefion" ploughing Zealand out of Sweden. We then visited the famous firm of Peter F. Herring, Cherry Brandy Distillery.

Early on Wednesday morning I, accompanied by my host Mr. Berthelsen, visited one of Copenhagen's famous public schools, "Bellashoj Skole", where the principal received us and I spent a most interesting hour learning about Danish methods of education. This school is a large one, about 1,700 pupils, grades 1-6; 6-10, with two large gymnasiums for boys and girls and large playgrounds and a planetarium. The higher grades, 10-13, are located in another school. Classes start at eight o'clock and last until three — six days a week, ten and a half months a year. School is housed in a simple brick building.

Early on Sunday morning, all the delegates met in the Court Yard at Christiansborg where we embarked in buses for a day's tour of North Zealand. First we passed through Copenhagen's beautiful suburbs, well kept homes and gardens and hedges. Houses here are mostly of red brick with tile roofs. An occasional white washed brick house with thatched roof, but more often the wash was a pale blue, yellow or pink. Every house had a flag pole — this was true everywhere we went in Denmark, and the Danish flag waved proudly in the breeze. This route by the shore, called the "Danish Riveria", was crowded with people, bicycles and cars. We visited the Castle at

Elsinore, Kronborg Castle, surrounded by three moats, where every year in the courtyard American or English actors play Shakespeare's "Hamlet."

After Elsinore we arrived at a summer resort motel in Hornbaek, on the Skager-Rack for lunch. We could see across the strait to Sweden.

On our return journey we visited Frederiksborg Castle, a marvellous castle with many towers. Two of them, named the King's Tower and the Queen's Tower, in full view of Sweden, were used as signal towers during the war.

Many people were visiting the Castle that Sunday and we were divided into groups and with a guide visited most of the rooms. The chapel here is most ornate, gold, with coat of arms of the royal family on walls, carved pews and oil paintings. Most colourful. Services are held here every Sunday. It was here that I took pictures of swans swimming in a moat.

On our return home we passed through rich farming country, tremendous fields with no fences, and saw the Castle where the King and Queen of Denmark were in residence.

We were back in Copenhagen at six o'clock in time to get dressed to attend a gala performance of the Royal Ballet. The Copenhagen people patronize and maintain a permanent Ballet School. A big cast, good music, enchanting scenery, colourful costumes, delightful dancing, one dramatic ballet and one comedy, provided us with an unforgettable evening's entertainment.

Monday we left Copenhagen early for a two days visit of farms, schools and old folks homes in West Zealand. On our way through Copenhagen suburbs we saw many large apartment blocks, all modern architecture built around a court. Then we passed through a truck garden area, dotted with many big green-houses. Here the road was under construction and the new road will be a wide boulevard.

The farm houses were of painted brick, with tile or thatched roofs; big fields, the Danish Red cattle tethered to stakes, grazing on lush bright green grass, in an orderly row, a common sight as we drove by. Here we also saw many orchards, trees seemed to be loaded very heavily with fruit and our guide told us that Denmark exports apples. However, the quality I saw in the stores wasn't very good.

We did not visit the famous Ringsted Church in Roskelda but drove on to Sorø. Here we visited the famous Home Economics School, "Ankerhus", founded in 1902 by Mrs. M. Lauridsen and we also had the

OUR PRESIDENT'S MESSAGE

Christmas Day will have passed and gone before this reaches you. May the spirit of the holiday season still abide and remind us of that immortal wish of Tiny Tim, "God bless us — everyone."

pleasure of meeting Mrs. Lauridsen, a sprightly old lady, who took a pride in showing us how her little school had developed into a training school for Domestic Science teachers. Here the girls, forty of them, twenty in each year (only two year's training course but eleven months a year) learn by doing. On our arrival in a flag and tapestry decorated hall, we were met by the principal (a man) and served apple juice. (The hall was really a gym.) Then we visited the attractive buildings where the girls, mostly rural, live and do their work. Each girl has her own room. The girls, dressed in blue uniforms and white aprons, sang "The House-wife's Song" for us.

The girls work in groups of 6 or 12 during first year, doing all the same kind of work for a week; kitchen, laundry, garden, some working in modern kitchens and laundries, others under more primitive conditions. The second year they do more advanced work; alone or in couples. The courses are as follows: practical work kitchen, household work, chemistry, anatomy, plant science, physiology, hygiene, knowledge about foods, knowledge about commodities, household economy, pedagogical training for adults and schools. Girls must be over 18 years to be accepted for this training. This school has also a five months course for young girls, home makers' course.

Our next stop was at Soro where we were the guests of the House-wives Union for lunch at a hotel. Here we visited the Old Academy, its garden and Church. Sunday had been Harvest Sunday and the beautiful, not too high, long Cathedral, whose walls are painted in soft blues and pinks, was decorated with flowers and wheat. This Cathedral was built in 1162.

We visited the adjoining boarding school for boys, "The Academy," which was started by the monks over 700 years ago. This school is now administered by the government and has an attendance of about 400 boys from 11 to 16 years of age. Special attention is given to the teaching of music and deportment. The boys playing cricket in the playfields seemed to be very happy and not a bit put off by the curious visitors. The King is a regular visitor to this school and has a special chair covered with red cloth in the assembly room.

Our next call was at Mr. Knud Andersen's farm, passing by an old "Round Church" built 1150. Mrs. Andersen was ready for her 40 visitors. We divided into two groups — one going into the house to partake of refreshments, the other visiting the spotless barns, sheds and weedless gardens. Here I saw my first Landrace Pigs and their length is really incredible. Mr. Andersen has 18 acres, grows turnips, grass, "corn", and some small fruits. He has six cows, two young stock, two horses, one sow, ten pigs and fifty hens. He and his wife do all the work on the farm. They have two young children. He makes about 6,000 kr. clear a year. This farm was once part of a very large estate.

Our last stop for the day, at least it was for me, was at

Fjennesler, where Mrs. J. Hansen, president of the House-wives Union, received the 40 delegates in her large living room and served us biscuits, wines and fruit. She had charge of finding a billet for each delegate and soon all were away to different homes for supper and the night. Three hostesses were very disappointed because their guests had failed to appear.

My hostess, who was unable to speak English, was very jolly and we got on very well, even though we could only use the sign language. Her daughter, an 18 year old, pretty, fair-headed girl, could speak English and while she was about she was kept busy translating for us.

This farm was a very big one and was run by my host, Mr. Hansen and his son-in-law. Mr. Hansen was very proud of his tractor and electricity. I saw very few tractors in Denmark. Mr. Hansen ships his whole milk to a co-operative butter and cheese factory. All farmers sell their milk this way in Denmark. The barns were not modern but very good. All hay is stacked outside—sometimes in an open shed, other times the hay is protected by a thatched roof.

The days are warm and evenings quite cool but no killing frosts till the end of November. This gives the farmers a long season to do their farm work.

After a good chicken supper my hostess and her daughter showed me around their spacious home. The house is 70 feet long, about 35 feet wide, with ten windows across the front, two stories high with dormer windows top story. The house is divided in two, my hostess living downstairs and her married daughter upstairs. (The married daughter has five beautiful fair-haired children — two sets of twins and a baby girl). The house was nicely furnished — two very large living rooms, dining room, kitchen, master bedroom, office, large hall and two small bedrooms, running water in kitchen and shower bath in cellar.

Before breakfast I visited the stable, walking across a cobbled court yard from the house to the barn that housed twelve cows. Another building had several pigs and chickens. There was a shed for the tractor.

Mrs. Hansen had a beautiful flower garden — not a weed to be seen anywhere.

After breakfast we left to visit the school. This Rural Elementary school had four bright class-rooms, movable



Mrs. Andersen's Farm

desks, a domestic science room and assembly play — room in basement. A wing adjoining held the gymnasium, manual training room and a library. Children came to school for eight o'clock, some coming on a school bus. Ages were from seven to twelve, 150 children. I admired particularly the sewing done by the girls and the plans and models built by the boys in manual training. The children, who were all outside playing in the courtyard while we were visiting in school, were called in and they sang several folk songs for us. One of the delegates thanked the principal, staff and children for a very interesting and informative visit. (Three men and two women teachers.)

We then visited a co-operative butter and cheese factory at Fjennesler, founded in 1887. We watched the butter being packed into special small barrels. Beautiful butter — the manager said that the butter from this factory had won several bronze, silver and gold medals. Butter and cheese is mostly for export. 5,000,000 kilos of milk were churned into butter and 2,000,000 kilos of milk were processed at this co-operative. After seeing their creamery and eating Danish butter I no longer wonder why Danish

butter is the best in the world. Even though cheese is made here — with just a dividing wall between butter and cheese factory — the butter was sweet and rich, and of uniform colour. The whey is returned to the farmers for hog raising.

We also visited an Old Folks' Home that had recently been built to accommodate fifteen people — some married couples. Each have their own room and are allowed to furnish it with their own furniture — all but the bed. Each floor — the building is two-story — has a kitchen, where tea and coffee can be made, a bathroom and showers. The dining room and living room, ground story, are furnished with Swedish modern maple finished furniture. Most of the people living here have a Government pension, although those that can pay (having private means) do so. The Home is beautifully situated facing Sole Lake. It is the Government's intention to have a Home like this in every district in Denmark.

I did not see the Cathedral of Roskilde, the Cathedral of State, founded in 1170; but returned to Copenhagen in the early afternoon to pack and get ready for the evening journey to The Hague.

The Month With The W.I.

This is the month when we visualize happy home comings and family gatherings. Let us remember the homes shadowed by the separation from loved ones in our country's service. Let us, as homemakers, co-operate to the uttermost hoping that ere another Yuletide we may truly say — "on earth peace, good will toward men". As proof of the good will already existing we find many branches reporting packing their Christmas parcels for overseas and remembering the sick and needy in their own communities.

Semi-annuals and other county happenings are also mentioned frequently. It makes one wish, as these accounts are read, all so packed with action projects, that there could be room for the column entitled just that, "County Happenings", which is run occasionally. Space, however, must be left for the first installment of Mrs. Thomson's account of her experiences abroad, so we shall have to omit that this time and make only brief references to these items in the branch reports. It is hoped complete stories were sent to your local newspapers.

Argenteuil: Arundel held its meeting in the new School Hall. Mrs. G. McGrandell, Convenor of Agriculture, was in the charge of the programme and the guest speaker, Mr. Bothwell, in his talk on "How to Improve Arundel School Fair", made many helpful suggestions. A table runner, sent from a sister branch in England, was on display, and \$5 was voted to the Cancer Fund. Brownsburg at a largely attended meeting had a sewing demonstration given by the Singer Sewing Machine Co. Plans were made for a card party and a wreath for Remembrance Day was purchased. Frontier catered to the School Fair. A sparkling debate, "Resolved that it is

better for a girl to have a business training than one in Domestic Science" was won by the affirmative. A contest, something made from a yard of cloth, was won by Mrs. Clark and Mrs. Fuller. Jerusalem-Bethany enjoyed



Mrs. C. W. P. Baugh, president Argenteuil County W.I., presents a gift from that county to one of their members, Mrs. A. Graham, Frontier W.I., at their semi-annual meeting, in Lachute High School. This was given as a tangible expression of their pride in the fact one of their members had received an international award in the A.C.W.W. essay contest, "The Country woman's Day". The latter prize was presented by Mrs. G. E. LeBaron, 1st vice-president, Q.W.I., who attended the meeting for that purpose. This consisted of a book, "A Young Traveller in Switzerland", by Mrs. Meier, A.C.W.W. vice-president from that country, and a certificate beautifully inscribed by hand, giving particulars of that event. The county prize was a book, "The Birds of America". The picture shows, left to right, Mrs. LeBaron, Mrs. Graham, Mrs. Geo. Leggett, past county president, and Mrs. Baugh.



Group of members from Argenteuil County at the Annual Convention. Mrs. Morton, F.W.I.C. President, and Mrs. C. W. P. Baugh, Argenteuil County President are seen left to right at centre front.

a reading, "The Origin of Thanksgiving" and a poem, "The Farmer's Thanksgiving." Two wedding receptions were catered to and \$5 sent to the Lachute School Board for the W.I. Progress Prize. Lachute had as their guest speaker Miss E. Lorraine How, Montreal, Director of Junior Red Cross for Quebec. Lakefield made plans for a party at which prizes will be given and donated \$5 to the School Fair in Lachute. Mille Isles studied the minutes of the Q.W.I. Board meeting and donated \$5 to the Cancer Fund. Morin Heights had a programme on Education in charge of that convenor, Mrs. C. Seale. Mrs. Blakely, Principal of the school, gave a helpful talk on "Welfare of the School" and showed three films on Education. Five persons attended the Blood Donor Clinic. Pioneer had their County president, Mrs. Baugh, as their guest. A paper on "The Origin of Thanksgiving" was read and a solo, "Bless This House", was beautifully sung by Miss Carol Parker. \$10 was voted a worthy cause and plans made for a rug-making demonstration. Upper Lachute and East End heard an address entitled, "Abundant Living Through Education", by Miss Audrey Clarke, Guidance Consultant of the Montreal Protestant School Board.

Beauharnois: Nitro held a largely attended course in sewing with Miss Campbell instructing. At their meeting Mrs. A. Montgomery, convenor of Agriculture, read an article on "The Care of House-Plants," and final plans were made for a Cribbage Party. Nitro No. 2 reports they have just held their first School Fair, when an excellent display of flowers and vegetables merited both praise and prizes. A travelling basket is being used to raise funds for a radio for their school, the other branch assisting with this project.

Bonaventure: Black Cape entertained the semi-annual county meeting, at which 56 members were present, representing all branches in the county, including the juniors. Mrs. A. Irvine was guest speaker giving an account of her visit to the Toronto Exhibition and points in the U.S.A. Four new members were welcomed to the branch. Marcil was gratified to receive a letter from the mother of their Austrian adoptee. Prizes are to be given in their school and a new member was enrolled. New Richmond is giving books to be used for school prizes.

A shower was held for a needy family and a gift presented to Mrs. Fallow, a member who is moving away. A play is being planned to aid the treasury. Port Daniel enjoyed a contest, "Naming Common Weeds", with the prize going to Mrs. D. Sullivan. Plans were made for a social evening. Restigouche realized the sum of \$21 from a tea and sale at the home of Mrs. W. Adams, the money being given to a member whose home was burned. Plans for a tea were discussed. New Carlisle reports forwarding letters re Protestant Women's Jail and Sex Crimes, as requested by the Q.W.I. Mrs. H. Chisholm had charge of Poppy Campaign and members took part in the Remembrance Day parade.

Chat.-Huntingdon: Aubrey-Riverfield entertained the staff of Howick High School. Many exhibits were shown at the School Fair and 130 cans of apple sauce were donated for school lunches. Plans are being made to furnish the Board Room in the new Barrie Memorial Hospital, at a cost of \$500. "The Island of Malta" was the subject of a talk by Mrs. Davidson. Dundee entertained Mrs. J. D. Lang, County president. Mrs. Bernhardt gave a resumé of her week at Macdonald for the "Short Course". Franklin Centre held a 500 and euchre party at which \$21.90 was realized. Howick voted \$11 toward prizes in Howick High School. The staff was welcomed and Mr. A. McArthur gave a talk on "Educational Training". Miss Lindsay, Home Economist for the Ontario W.I. brought greetings and spoke of the Junior Clubs there. Huntingdon decided to give prizes for a Public Speaking Contest, also in Manual Training and Domestic Science. Rev. R. D. McLean spoke on "Some Things to be Thankful For." Ormstown has canned more than 350 cans of fruit and vegetables for the High School cafeteria. \$100 was given to the new Barrie Memorial Hospital. The High School staff is to be entertained.

A County semi-annual reported here, with Miss M. S. Taylor, Can. Cancer Society, as guest speaker. This county has raised \$495 for local hospitals, \$70 to Flood and Fire Funds, and \$65 to the Cancer Fund.

Compton: Bury Juniors had a course on making Christmas cards conducted by Miss Campbell and the girls are very busy now filling orders for sale, as well as



Brownsburg members made gloves. This was a class held before Miss Birch left the Q.W.I.



Executive of Chateauguay-Huntingdon W.I. with a few visitors. Mrs. Lang, the county president is in the centre of the front row.

making their own. Bury Seniors had as their guest, Mrs. Waldron, County president, who spoke on the Blue Cross. \$11 was voted for school prizes and a paper given on "Do you know your Government? One new member was welcomed and three members were presented with life memberships. Cookshire gave a \$50 bursary to a girl who is training for a nurse, \$10 for school prizes and \$3 for County Fair prizes. Canterbury held a potted plant contest with prizes given by the convenor of Agriculture, who also conducted a flower quiz. This branch joined with Bury for a visit to the new school at Ayer's Cliff. Scotstown donated \$35 to the cemetery, \$20 to the Library and \$5 for High School prizes. South Newport had a paper on "The Origin of Thanksgiving". The proceeds from a card party were satisfactory and clothing has been sent to Manitoba W.I. Flood Relief, for which thanks have been received.

Gaspé: L'Anse Aux Cousins distributed the fair prizes, eight exhibitors won 43 prizes. A paper, "Enjoy your Child", was read by the Convenor of Welfare & Health. Sandy Beach had the seasonable rollcall and plans were made for a parcel post sale. Wakeham reports that their school again won the cup for the highest number of points at the School Fair, which is sponsored by the W.I. This will now be retained by this school. Best wishes, with a "cake" were presented to a member on her birthday. York donated a cup to the Children's Fair for the next year. A Military Whist netted the sum of \$60.

Gatineau: Aylmer East had as their guest, Mrs. H. Ellard, Prov. Convenor of Welfare & Health, who spoke on the two resolutions recently circulated for signing by the branches. Members were urged to help the Can. Cancer Society in their fight. Breckenridge held a social evening which netted \$35 for branch funds. A paper on "Window Cleaning", was read and reports from Mrs. Fitcher, Ont., W.I. President who was attending the A.C.W.W. Conference. Mrs. F. Lusk conducted a quiz on Canada, \$5 was voted to the hospital at Wakefield and a new member welcomed. Eardley had a "Best humorous story contest" which was won by two members. Several

donations helped to pad the treasury. Kazabazua is already planning for their School Fair for next year and a committee was appointed for that purpose. This branch is to be congratulated on winning a prize on their hand-pieced quilt in a special W.I. exhibit at the Central Canada Exhibition at Ottawa. Rupert reports \$30.75 for branch funds raised at a social evening and plans made for a card party for the same objective. Wakefield is co-operating with district organizations to further plans for their hospital, for which a provincial charter has now been granted. A play is to be presented to assist with funds and a gift of flannelette from a Ottawa lady acknowledged. Wright gave a donation to the proposed county hospital and another to a sister branch to help out with their School Fair. Their contest was "Homemade Candy". Fort Coulonge held an apron parade and auction and received a donation of money from a member. Current events were discussed by Mrs. Duke and a paper read entitled, "Canadian Consumer." Quyon heard Mr. Tolhurst, Principal of Shawville High School, discuss "Education". The staff of the Intermediate School and St. Mary's Roman Catholic School were also guests. A spirited debate, "Should Women be on the School Board", followed.

Richmond: Cleveland held a pie social which netted \$18.15. Dennison's Mills attended a film show by the agronomer and purchased a wreath for Remembrance Day. Gore held a baby shower and Melbourne Ridge had a social evening with Mrs. T. P. Ross as guest who spoke on "Citizenship". Shipton purchased a wreath for Remembrance Day and is raising money to buy more dishes. Spooner Pond catered for a teachers' meeting. One of their members, Mrs. J. Sinclair, was the speaker on the W.I. broadcast over CKTS. Her subject was "Citizenship". Windsor Mills signed and forwarded the current resolutions.

Rouville: Abbotsford gave a warm welcome to their fellow member, Mrs. Thomson, Q.W.I. president, on her return from the A.C.W.W. Conference. She gave a



Members of the Restigouche Branch taken by Miss Birch when she visited them to teach a class in leather.



The group at Wyman who took sewing from Miss Campbell.

talk on her trip and expressed her pleasure at being home again. Jelly was brought in for the Montreal Diet Dispensary.

Shefford: Granby Hill made plans for a "Member's Night". \$10 was donated to the Fund for the Blind, and each member gave pot-holders for their annual sale. South Roxton entertained the county semi-annual. Warden appealed for linen for the Cancer Society and canned goods for the Bondville orphanage. Reading material is to be sent to England for distribution to hospitals.

Sherbrooke: Representatives of all branches attended a tea given in honour of Mrs. E. E. Morton, President of the F.W.I.C. at the home of Mrs. A. E. Abercrombie, where she was a guest. Mrs. Morton spoke briefly of her trip and the county president, Mrs. Richards, sang "My Task". The members were delighted to have this opportunity of meeting Mrs. Morton.

Ascot catered to the Ploughmen's Association for their banquet. The Beatrice Cameron Memorial Scholarship, and other prizes, were presented at the High School opening. Belvidere held their annual flower and vegetable show with Mr. W. S. Richardson as judge, who later gave them a talk on "The Care of Tomato Plants". A rummage sale was reported. Brompton Road catered to the Ploughmen's luncheon. Donations were made of \$8 to Community Chest, \$2 Hospital Linen Fund, \$2 to veteran in hospital, \$10 overseas parcel. Cherry River entertained the county semi-annual and held a contest and sale. Lennoxville heard papers on "History of Early Country Doctors in the E.T." and "Polio". \$20 was donated to V.O.N., \$5 to Community Chest and \$10 to County School Fair. Mrs. H. Worster, past president, was presented with a life membership. Milby sent two quilts to the Manitoba Flood Relief and collected vegetables for the Salvation Army. A table runner, donated by Mrs. S. Cairns, was auctioned and a much-appreciated gift received from Mrs. F. Allcorn, a hand painted picture of the W.I. Club House, her own work. Oxford held a tea and food sale in addition to their monthly sale. Congratulations were extended to a member celebrating her 30th wedding anniversary.

Stanstead: Ayer's Cliff had an afternoon for their teachers and gave a gift to a member leaving the community. Beebe tied three quilts, two for the Wales Home. Two neighbouring branches, Stanstead North and Tomifobia, were guests at this meeting. An Institute pin was presented to a member who is leaving and \$51 reported from the Harvest Supper. Hatley voted money for school prizes. Articles were read on "Brain Food for the Backward Child", and "Who should handle the Family Money". At Minton the members contributed to the programme by reading articles from the College Journal and other home magazines. North Hatley members assisted with the school and pre-school clinics. Conservation of food, soil, wild life, natural resources and beauty was discussed. A get-together for teachers and parents was well attended. Stanstead North held its annual dinner and sale in the "Brick School House" and realized the sum of \$98.50. Tomifobia had speakers from Stanstead who discussed "Border Community Home and School Association". Plans were made for an oyster supper and dance. All members now have Institute pins. Way's Mills is working on their Village History. Two families have been helped with clothing and food so that the children can attend school. A card party is planned.

Vaudreuil: Cavagnal's last meeting was a business one. Inquiries are to be made as to Travelling Library. Vaudreuil-Dorion had a talk on "Publicity" by Mr. H. Sage. \$13 was realized from the "Travelling Basket" and \$25 was donated to the Salvation Army.

(Correction: September issue of Journal — Marcil's report should read \$15 for School Fair prizes, not \$5.)

Plan Semi-Annual Meetings

Advance notices of the semi-annual board meetings of the Quebec Women's Institutes have just been released. This will be held in the Queen's Hotel, Montreal, Jan. 19-20, 1951.

Much important business as to future policies of the Q.W.I. will be discussed and preliminary plans drafted for the Biennial Convention of the Federated Women's Institutes of Canada, which will be entertained by the Q.W.I. at Macdonald College next June.

Thanks for the Parcels

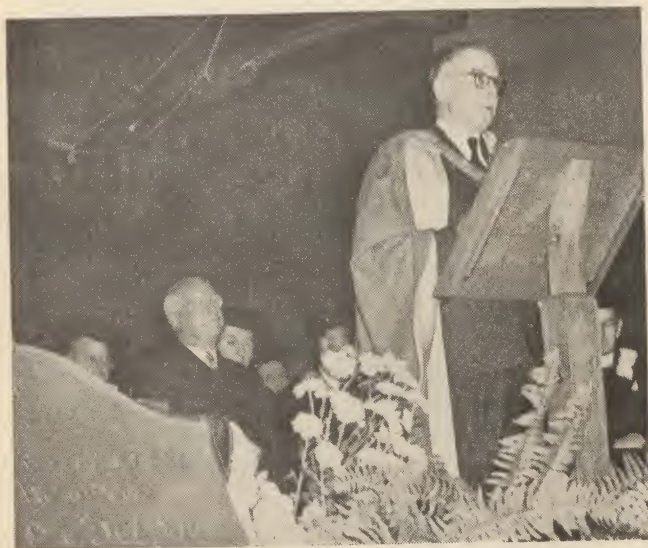
Branches of the Quebec Women's Institutes have just received a letter from Miss J. M. Bovey, Chairman, Personal Parcels, Women's Voluntary Services, Montreal, thanking them for their support of the Personal Parcel project.

Expressing the appreciation of the W.V.S. for the interest and generosity of the branches to the unfortunate people of Great Britain, who still suffer from severe war-time rationing Miss Bovey adds; "We earnestly hope that your group will not slacken their efforts as the need for these Personal Parcels is still very pressing."



THE COLLEGE PAGE

The Fifth War Memorial Address



General the Honourable A. G. L. McNaughton was the guest of the College on November 9th, and in the evening delivered the fifth War Memorial Address to students, staff members, and invited guests.

The Memorial ceremonies followed the traditional pattern established five years ago when the first address was given by the Honourable Vincent Massey. An academic procession opened the ceremonies; after prayer and the singing of "O Canada" a wreath was placed on the memorial plaque by the vice-president of the Students' Council, Miss Mary Louise Gasper. Chancellor Tyndale, chairman for the evening, introduced General McNaughton, who was thanked at the close of his address by Dean Brittain. The singing of the National Anthem and an academic recession brought the function to an impressive close.

General McNaughton, who was Canada's permanent delegate to the United Nations, and representative on the Security Council in 1948 and 1949, spoke of the evolving policy of the United Nations, both in its defensive features, necessitated by recent events in Korea, and also in its more positive and creative aspects, particularly in its efforts to assist in the development of the less advanced countries of the world. He pointed out that in this phase of its programme, the countries which are the most highly

advanced industrially are sharing their techniques and knowledge with their neighbours, and are showing them how to make the most of their natural resources. Experts are sent abroad from Canada to give technical assistance, and in this part of the U.N. programme, Macdonald College, a training place for agricultural scientists and for nutritionists has an important role to play.

Seeing Double

Students come to Macdonald College from all over the world, but this year something new has been added — they're coming in pairs!

Enrolled this session in the School for Teachers, in the School of Household Science, and in the Macdonald High School, are no less than seven and a half sets of twins. We have only fourteen people in our photograph; the eighth pair split up, Barbara Smith of Arvida coming to the School for Teachers while her sister went into training in a Montreal hospital. We tried to get her to come out for the picture but she couldn't get away from her duties.

At the left in the back row are Margaret and Margery Ness of Howick, and next to them are Anne and Barbara Corbett of Montreal. These four are in the School for Teachers. Seated in front of the Ness girls are Jean and



Mary Finlayson of Ottawa, in the first year of the B.Sc. (H.Ec.) course.

The two boys in the back row are Henry and Ted Yates from Maxwellton Farm in Baie d'Urfe, and beside them are John and Jean Cornett of Ile Perrot. Seated on the steps are Patricia and Pamela Walsh of Macdonald College, and behind Pamela are Robert and Sonia Common, also of the College.

Even with this extra help from the twins, total enrollment has dropped a little since last year. We have finally settled down, now that the Diploma students are in, at 745 in all classes, which compares with 813 at this time last year, and which is the smallest enrollment we have had since 1945-46. The peak year was in 1948-49, when we had 886 students in all.

Mac. Professor Heads International Society

Prof. E. W. Crampton, Chairman of the Department of Nutrition at Macdonald College, has just been elected President of the American Society of Animal Production, an organization representing most of the professional animal husbandrymen in North America. This is the first time that a Canadian has been so honoured.

What Breaks Down Silos?

Silage juices, the pressure exerted and the abrasive action of settling silage influence the durability of silos. Because silage is the result of natural fermentation of green plants it is always moist and often saturated with slightly acid juice that attacks some of the materials of which silos are made.

This juice is a preservative of the silage and of wood, but tends to disintegrate lime compounds in mortars and in concrete. When the silage is loosened and thus exposed to air it hastens the corrosion of iron and steel. There is no indication that silage juices damage glazed, vitrified tile; but they do attack the mortar joints and the reinforcing imbedded in the walls with leaky joints.

The pressures developed by silage vary both with its moisture content and the depth to which it is stored. The silo must be strong enough to resist these pressures. Older silos designed for silage made from well-matured corn or crops that have been field-dried somewhat after being cut may need additional reinforcement if grass or other crops of high moisture content are to be stored in them.

These facts, and the information needed to build silos that will weather the years successfully, are taken from Extension Bulletin 256, "The Durability and Maintenance of Silos," just released by Rutgers University, New Brunswick, New Jersey.

Over \$50,000,000 A Year to Farmers

Over \$50,000,000 a year — that's what woodlots bring Canadian farmers, who supply 20% of the pulpwood used in this country, 90% of the fuel wood and practically all the fence posts. In addition many farmers do a thriving seasonal business in Christmas trees and maple syrup, and those who grow their own firewood save a cash outlay of at least \$100 a year in most parts of Canada.

These interesting facts showing the cash value of trees to farmers are taken from "Woodlots," a bulletin just published by the Royal Bank of Canada. In listing additional benefits the bulletin says:

"No one can count the added cash value of crops and farms due to shelter belts. They protect grain, keep the soil from being scooped into the air by wind or washed away by rain, and provide shelter for human beings and livestock."

This bulletin does not stop at promoting woodlots. It goes into details about the best trees to grow under various conditions, and how to manage them for the best returns. In fact, it deals with almost every aspect of the farm woodlot, and concludes:

"Forestry expressed in woodlot management could well become the means of making the countryside more attractive and interesting. It can make the agricultural off-season a time for producing that little bit of extra income which would be the difference between living and living comfortably. A well-managed woodlot could put a son or a daughter through university, provide the cash for a vacation for the old folk, or pay for the upkeep of a car — and we are talking now about a very little woodlot. Many farmers are making their woodlots do much more."

Copies of this publication can be secured free from the Royal Bank of Canada or the Adult Education Service of Macdonald College.

Treat Certified Seed

Many growers are under the misapprehension that if seeds are certified they need no further treatment. This is an erroneous belief, says G. R. Snyder of Canadian Industries Limited.

According to laboratory tests made over a period of years at the University of Georgia, says Mr. Snyder, even the best certified seed carries disease-producing organisms and substantial increases in yields can be obtained by proper treatment of registered seed.

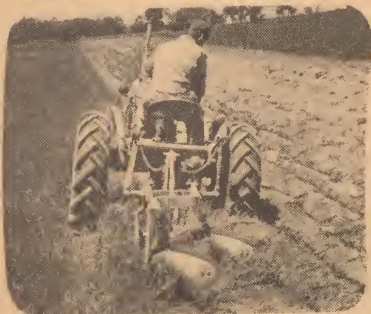
Such treatment has a double-barrelled effect. It disinfects the surface of the seed and protects it from the attack of soil-borne organisms after it is planted.



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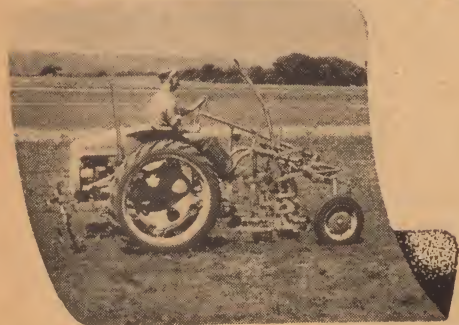
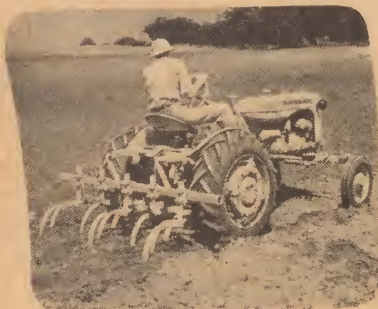
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